EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992



| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 1.1. Teoreetiline matemaatika | | | | | | |
| 100 | Linear topological properties of the spaces of sequences or operators | TÜ Türnpu H. Oja E. Leiger T. | fair to very good | support young researchers to move into modern parts of analysis | nõus | 3.0 |
| 102 | Differential geometry & applications | TÜ Lumiste Ü. Rahula M. | very good to excellent | support strongly recommended | nõus | 5.0 |
| 105 | Ill-posed problems | TÜ Vainikko G. Hämarik U. Raus T. | very good, together with projects 101, 109-1 - excellent | support strongly recommended | nõus | 5.0 |
| 107 | Topological algebras | TÜ Abel M. | fair to good | support the same way as teachers associated with chairs | nõus | 2.0 |
| 108 | Investigation of algebraic structures & their representations | TÜ Kilp M. | fair to good | extending into areas of more current interest strongly urged | nõus | 2.0 |
| 109 | Weakly singular integral equations | TÜ Vainikko G. Uba P. | very good quality, in the framework of three projects - excellent | support strongly recommended, totally most strongly recommended, 3 projects together most | nõus | 5.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 109-1 | Numerical methods for ordinary & partial diferential equations | TÜ<br>Vainikko G. Oja P. Saarniit I.-I. | good | support strongly recommended | nõus | 3.0 |
| 139 | Rate-spaces in the theory of summability | EPMÜ<br>Sikk J. | fair | continue research in a more fruitful direction | nõus | 1.0 |
| 306 | Acts over monoids | TPEDÜ<br>Normak P. | good | give support | nõus | 3.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 1.2. Rakendusmatemaatika | | | | | | |
| 103 | Estimation in multivariate statistical models | TÜ ZBI<br>Kollo T. Möls<br>T. Pärna K. | good | support strongly recommended | nõus | 3.0 |
| 104 | Investigation, elaboration & application of computational statistical models | TÜ<br>Tiit E.-M.<br>Ääremaa K.<br>Tooding L.-M. | good | support strongly recommended | nõus | 3.0 |
| 106 | Teaching programs for computerized exercises of basic courses on mathematics | TÜ<br>Prank R. | very good | support strongly recommended | nõus | 4.0 |
| 36 | Applied mathematics | KÜBI<br>Petersen I. | fair to very good | should be integrated with Dep. of Math of the TTU | nõus | 3.0 |
| 40 | Dynamical processes in thin-walled structures | TTÜ<br>Metsaveer J. | group well informed, adopt relevant analytical& numerical techniques | better comput. capacity needed, adaption of techn. in new areas recommended | nõus tehn.tead.eksp.3-4,t ungivalt soovitatud,hea PhD tase, vajalik uus adressaat | 3.0 |
| 41 | Applied methods of mathematical analysis, algebra & geometry | TTÜ<br>Ainola L. Päeva H. | good & competent | give resources, integrate with the Dept. of Math. of Cybern. Instit. | nõus | 3.0 |
| 43 | Equations of movement & state | TTÜ | good | support recommended | nõus | 3.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | of mechanic systems & optimal design of plastic elements of constructions | Kenk K. Kirs J. Relvik H. | | | tehn.tead.eksp.2 ei ole nõus -ebapiisavalt tugev töö, integreerida teistega | |
| 86 | Informational aspects of computer aided design (CAD) foundations | TEFI Lausmaa T. | It is not clear why researcher bypasses standard methods and introduces his own. Mark 3-1-1 (engineering) | | 3-1-1 | 0.0 |
| 87 | Theoretical & experimental investigations of cryotechnological processes | TEFI Temkin L. | good, but application of results now is questionable. Mark 2-2-2 (engineering) | coop. with TU, intern. publ.needed, concentr. on inverse nonlinear problems | nõus | 3.0 |
| 99 | Optimal design of pastic structures & investigation of the behaviour of non-elastic beams, plates & shells | TÜ Lellep J. Lepik Ü. | very good | support strongly recommended | nõus tehn.tead.eksp.nõus, tungivalt soovitada, hea PhD tase, leida uus adressaat | 4.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 1.3. Füüsika | | | | | | |
| 140-1 | Spectroscopic diagnostics of plasmo-chemical processes in the active media of discharge-pumped gas lasers | FI Trestsalov A. Aarik J. Lõhmus A. Tiit V. | very good | support most strongly recommended, group could be larger | nõus | 4.0 |
| 140-2 | High-resolution laser spectroscopy of jet-cooled molecules | FI Trestsalov A. Aarik J. Lõhmus A. Tiit V. | good, plans are interesting | support strongly recommended, publishing in internat. journals recommended | nõus | 3.0 |
| 140-4 | Optical helium cryostats | FI Lõhmus A. | impressive ideas and skills, prosp. to high-tech market, used in projects of v.high quality | support to be continued | nõus, projekt kuuluks valdkonda 2.9 | 4.0 |
| 140-5 | Instrumentation for VUV & UV spectroscopy & its application | FI Tiit V. Aarik J. Lõhmus A. Trestsalov A. | fair, not able to follow internal rapid developmnt | support not recommended, group should be engaged into some technical company | nõus | 1.0 |
| 140-6 | Development of high-efficiency eximer laser systems | FI Trestsalov A. Lõhmus A. Tiit V. Aarik J. | good to very good, but not unique | support strongly recommended, support linked to econ. profit from the project | nõus | 4.0 |
| 24 | Selected topics in general | AAI | from good/very good | no further support | nõus | 3.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | relativity & gravitation | Unt V. | to fair with offbeat topics | (apart from salaries) | | |
| 329 | The evolving teaching of physics in the system - school, university, professional training | TÜ<br>Karu G.<br>Vooglaid H. | | ought to be supported in evolving their work | nõus | 0.0 |
| 331 | Radiation physics of dielectrics | TÜ, FI<br>Pung L. Seeman V. Ots A. Tarkpea K. Lushchik A. | good, competitive | should be adequately supported | nõus | 3.0 |
| 349 | Study of materials using method of photoelectron spectroscopy | TÜ<br>Villem J.<br>Villem N. | fair, internat visibility low | no further support apart from salaries | nõus | 1.0 |
| 350 | Investigation of the high-frequency & pulse discharge formation machanism in molecular & inert gases at near-atmospheric pressures. Working out excimer lasers & their application in medicine | TÜ<br>Kudu K. | very good, high sci. relevance, theor.&experim. efforts well combined. Mark 4-3-3 (eng.) | investments in modern electronics & computers, intern. cooper. needed | nõus | 4.0 |
| 369 | Alkaline Earth Sulphides (AES), preparation, characterization, crystal lattice defects & luminescence | TÜ<br>Allsalu M.-L. Seeman V. Danilkin M. | not done | recommended to integrate in project 331 | nõus | 1.0 |
| 373 | Laser optics & spectroscopy (5 projects) | KBFI<br>Liidja G.<br>Lippmaa E.<br>Nagel U.<br>Blumberg G. ... | good, researchers very competent but projects are disperse | adequate support needed for optic spectroscopy of proteins & enzymes | nõus | 3.0 |
| 374 | Magnetic resonance & raman scattering studies of high temperature superconductors & related compounds | KBFI<br>Lippmaa E. Joon E. | very good to excellent, research field extremely competetive | group deserves to be supported in the fullest | nõus | 5.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 375 | Magnetic resonance | KBFI<br>Lippmaa E. Pehk T. Kundla E. | good to very good, in the past - excellent | high level support recommended, find its own directions of work | nõus | 4.0 |
| 42 | Massless wave equations. Superfield methods in the theory of gravitation & elementary particle physics | TTÜ, TPÜ<br>Loide R.-K.<br>Mankin R. | fair, interntnl recognition very limited | support needed to lessen teaching duties, reorient. to modern topics | nõus | 1.0 |
| 500 | Investigation of vibronic interaction and vibrational relaxation in molecules isolated in supersonic jet and low temperature matrices | KBFI<br>Subbi J. | very good in experiments & theory | support most strongly recommended, young researchers needed | nõus | 4.0 |
| 503 | Theory of elementary particles & gravitation | FI<br>Keres H. Ots I. | good | continue support, emphasis on modern theories | nõus | 3.0 |
| 504 | Solid state theory | FI<br>Kristoffel N.<br>Hizhnyakov V. | good to very good, group is versatile | keep it alive as backbone of Estonian cond.matter theory develop ties with education & exp | nõus | 4.0 |
| 505 | Investigations of ionic crystals & high temperature superconductors by spectroscopic methods | FI<br>Lushchik Ch.<br>Kuusmann I.<br>Zazubovich S.<br>Denks V. | fair to very good, competitive | continued support recommended, establishing post-graduate program needed | nõus | 3.0 |
| 506 | Exoelectron emission, crossluminescence & energy transfer in ionic solids | FI<br>Elango M.<br>Ausmees A.<br>Kikas A.<br>Käämbre H. | very good, competitive | continued support,cooper.foreign synchrotron labs,engagement of students strongly recomm. | nõus | 4.0 |
| 507 | Laser spectroscopy at low & ultra low temperatures | FI<br>Kink R. Lõhmus | good to very good, original, | continued support at todays level, | nõus | 4.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | A. Selg M. Stolovich A. Korrovits V | competetive | post-graduate students needed | | |
| 508 | High resolution optical spectroscopy of molecular impurities in solids | FI Kikas J. Renge I. Mauring K. Suisalu A. | good, has high relevance in biol. and bio-physics | continue on the present level, coordin. with project 514, engage biologists | hinnang osati segi aetud 514-ga, tsiteerituga nõus | 3.0 |
| 509 | Disorder & phase transitions in crystals studies by Raman spectroscopy | FI Haller K. | satisfactory, has interesting results | increase number of researchers, at the momentbetter direct resources to other projects | nõus | 2.0 |
| 510 | Spectral hole burning & fonon propagation in crystals with colour centres | FI Sildos I. Kikas J. | very good, important for applications, fund.results unique and good | should be continued, stronger cooper. with diamond groups elsewhere | nõus | 4.0 |
| 511 | Optical spectroscopy at high pressures | FI Laisaar A. | very good | support for proceeding & expanding recommended through interaction with W.Europ. research | nõus | 4.0 |
| 512 | Four-dimentional holography & its application for ultrafast optical data processing | FI Saari P. Kaarli R. Sõnajalg H. Rätsep M. | good, rather unique in intrnl perspective, equipment adequate & competitive | continued support at constant level recommended | nõus | 3.0 |
| 513 | Ultrafast dynamics of photoexcitations in solids | FI Aaviksoo J. | very good | continued support recomm., interaction with groups outside Estonia needed | nõus | 4.0 |
| 514 | (Sub)picosecond time-resolved spectroscopy of organic & | FI Freiberg A. | research is interesting & | continue on the present level & | hinnang osati segi aetud 508-ga | 4.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | photosynthetic systems | Pullerits T.<br>Kukk P.<br>Timpmann K. | valuable | coordinate with project 508. | | |
| 515 | Spectral hole burning: optical dephasing in glasses, optical memories & neural networks | FI<br>Rebane K.<br>V.Palm (jun) | good, major effort demanded to turn it into a competitive technological system | Estonia should take advantage in spectral hole burning and develop it further | nõus | 3.0 |
| 516 | Mössbauer spectra of solids, nanosecond transient phenomena | FI<br>Realo E. | good international quality | it is of value to have a Mössbauer spectroscopy group, need of post-graduate students | nõus | 3.0 |
| 517 | Investigations of thin films & application of thin films in sensor & electroluminescence devices | FI<br>Aarik J. | good, has potential to become internatily competitive, some part very good | increased support recommended, increase internat. contacts | nõus | 3.0 |
| 518 | X-ray structural analyses | TÜ<br>Haav A. Mändar H. | fair, internationally non-competitive | stronger contacts with materials fabrication groups recomm. | nõus | 1.0 |
| 519 | Paleodosimetry | TÜ<br>Jaek I. | not evaluated as falls outside the 1.3 field | | | 1.0 |
| 520 | Electroluminescence capacitors | TÜ<br>Vassiltchenko V. | fair, no future plans | support not recommended, if continued- in contact with other groups, redirect | nõus | 1.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 1.4. Astrofüüsika, kosmoloogia ja atmosfäärifüüsika | | | | | | |
| 14 | Physical processes in stellar atmospheres and envelopes | AAI Sapar A. | good to very good, great disparity among group members | support strongly recommended | nõus | 4.0 |
| 15 | Atmospheric structure of red giants & nonstable stars & their chemical abundances | AAI Kipper T. Nugis T. | good to very good, only minor part of results in major refereed journals | support strongly recommended, use of major telescopes abroad significant | nõus | 4.0 |
| 16 | Evolution of low mass X-ray binaries and presupernovae | TY Ergma E. | very good | support most strongly recommended, computer links to foreign res. needed | nõus | 4.0 |
| 17 | Structure & evolution of galaxies & their environments | AAI Einasto J. Jõeveer M. | good to very good, has some impressive results | support strongly recommended at least at present level | nõus | 4.0 |
| 18 | Study of the large scale structure of the Universe, its formation and evolution | AAI Einasto J. Saar E. | very good to excellent | support most strongly recommended, research should be maintained at a high level | nõus | 5.0 |
| 19 | Estonian radiation climate & energy balance of the ground surface | AAI Ross J. | very good | support strongly recommended | nõus biol.eksp.hinne 5 | 4.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 20 | Optical monitoring of Estonian vegetation | AAI<br>Ross J. Kuusk<br>A. Marshak A.<br>Nilson T.<br>Reeman J.etc | very good - excellent | sufficient support most strongly recommended | nõus | 5.0 |
| 21 | Large-scale atmospheric circulation & cloud-cover climatology (2 projects) | AAI<br>Rõõm R.<br>Keevallik S.<br>Kärner O. | 1- very good, 2- good, as work is in preliminary stage | support as well as participation in teaching at TY strongly recomm. | nõus | 4.0 |
| 22 | Remote sensing of the atmosphere & the Earth´s surface | AAI<br>Veismann U.<br>Eerme K. Avaste O. | very good | strongly recommended to concentrate on environmental issues | nõus | 4.0 |
| 25 | Recent crustal movements of the Earth´s crust in Estonia | AAI<br>Torim A. | not evaluated | not be given further support, engage Torim in geod. mapping + teaching | nõus | 1.0 |
| 326 | Spectrometry of electrical mobilities & sizes of aerosol particles & charged clusters | TÜ<br>Tammet H. | very good, in certain aspects world leading | support for basic research strongly recommended | nõus | 4.0 |
| 328 | The investigation of: the radiation transfer in the atmosphere in plant stands, in the surface layer of the Baltic Sea, the optical parameters of them, global distribution of cloudiness, modelling of NLC (noctilucent clouds) | TY<br>Avaste O.<br>Knyazikhin J.<br>Ohvril J.<br>Reinhart M. | good, perhaps not entirely up to date by intern. standards | continued support recomm., activities reorient.to internat. trends | nõus | 3.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 1.5. Biofüüsika | | | | | | |
| 23-2 | Leaf photosynthesis and influence of ozone on plant productivity response of plants to increasing carbon dioxide and ozone | AAI Moldau H. Sõber A. Sõber J. Rämma H. | good, has environmental & scientific interest | support strongly recommended, new equipment needed | nõus | 3.0 |
| 274 | Complexes of nucleic acids with sequence specific ligands (three projects) | EBI Raukas E. Aruja A. Polokainen A. Räim T. | fair to good, but work on TMV assembly lacks future direction | recommended for support, define future directions | nõus | 2.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 2.1. Materjaliteadus | | | | | | |
| 125 | Preparation, chracterization & utilization of red algae galactans & sorbents on their basis | KI Truus K. | poor, basic res. is lacking | support not recommended | Gr.3,otsida finants.mujalt Tehn.tead.eksp.3-2-1 ,osal.finants,sest kohalik toore | 1.0 |
| 126 | Negentropic prediction method of the technical service life of concrete structures & development of perspective testing devices | ETUI Sammal O. | res. seems sound, papers presented at intern. congresses. Mark 3-2-2 | publish in intern. journals | nõus,3-2-2 jätkata,tulevikus finants.ER Katsekoja kaudu,leida Eesti adressaat | 3.0 |
| 332 | Investigation of physical phenomena in thin solid films & application of the films in electroluminescence devices | TÜ Tammik A. Rammo I. | clear evaluation not given, approach is positive. Mark 3-2-2 | use electronic spectroscopy, invest. CaS&SrS, staff should be reduced | nõus, 3-2-2 jätkata, aktualiseerida, leida Eesti adressaat | 0.0 |
| 52 | Special cements & concretes on the basis of the high calcium fly ashes | TTÜ Kikas V. | lack of basic res., but actual for ind.,has great econ.& techn. potential. Mark 2-2-3 | ought to be continued, contacts with ind.& western countries | nõus 2-2-3, töö Eestile vajalik, jätkata, finantseerida väiksemat rühma | 0.0 |
| 53 | Investigation of the structure & properties of materials with election beam methods | TTÜ Paat A. | lab. has potent. as good local facility, bioenergy & ecol.interesting. Mark 3-2-2 | equipment should be kept up to date, continue for appl. res. | nõus, -2-2, säilitada elektronmirosk. uuringud (rühm kuni 3 in.) | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 54 | Excimer laser technology for high-temperature superconducting (HTSC) microelectronics | TTÜ Vallaste H. | good, high standard, excellent team, plans are perspective. Mark 4-3-3 | collaboration with colleagues abroad rec. | pole nõus, -3-3 jätkata koostöös ETA FI ja KBFI-ga, leida Eesti adressaat | 0.0 |
| 79 | Wear & disintegration processes | TTÜ Kleis S. | modeling and estimates erosion resistance is of top intern. standard. Mark 4-3-3 | microscopy and surface analysis should be strenghtened, intern cooper. | nõus, 4-3-3 jätkata finantseerimist, koostöö ETA-ga (TEFI) | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 2.2. Mehaanika | | | | | | |
| 164 | Working out the methods of determination of the residual stresses in coats by deformation of the elastic substrate | 347 Kôo J. | difficult to evaluate, methodology is standard. Mark 2-2-2 | future experim. investig. seem appealing, but they rely on local means | nôus soovitatakse, vajalik rakendus Eestis ja rahvusvahelised sidemed | 3.0 |
| 38 | Solid mechanics | KüB.I Engelbrecht J. Aben H. | very good-excellent. Mark 4-3-3 | stronger coupling of res. to teaching recommended | nôus väga tungivalt soovitatud, tähtis Eestile, ôppetöö arenemas | 4.5 |
| 55 | Unsteady flow in pipes | TTÜ Liiv U. | potential for exper. work good, data eval.traditional, but info of interest. Mark 3-3-3 | develop contacts with turbulence modellers, publish intern. | nôus tungivalt soovitatud, rahvusvahelised sidemed arenevad | 3.5 |
| 56 | Mathematical modelling & tuning of internal combustion engines | TTÜ Sillat R. | sci. level low, no intern publ., math. modell. may be of good quality. Mark 2-2-2 | intern. publ. and systems approach strongly rec. | 3-2-2 | 3.0 |
| 89 | Development of aerodynamics of gas-dispersed flows & laser diagnostic methods | TEFI Laats M. | work seem to be experim.& technol. well composed, technol. relevant. Mark 3-2-3 | | nôus jätkata, vajalik rakendus Eestis, rahvusvahelised sidemed | 3.5 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 2.4. Energeetika | | | | | | |
| 230 | Elaboration of methods & complex theory for the control & providing controllability of optimal functioning & development of electricpower systems (EPS) | TEFI Krumm L. Terno O. | very good, can compete intern., sci.& econ. relevance very high. Mark 4-3-3 | adequate funding & computing power + experimental facilities needed | 4-3-2 | 4.0 |
| 57 | Electric power systems modelling & control Discharges in high voltage insulation (2 projects) | TTÜ Valdma M. | 1- seems sci.based extensive work of qualified staff 2- no science. Mark 3-2-2 | 1- direct contacts to make conclusions needed | 3-2-2 | 4.0 |
| 58 | Oil shale plants ecological cleanness enhancing & ash utilizing | TTÜ Arro H. | form of presentation results does not permit scientific evaluation. Mark 0-0-0 | | 4-3-3 | 4.0 |
| 59 | Influence of mineral matter of fuels on operating conditions of stesm generators | TTÜ Ots A. | sci. & techn. relevance high. Mark 5-3-3 | cooper. with res. groups in Sweden (gas turbines using dirty fuels) recommended | 5-3-3 | 5.0 |
| 60 | Heat transfer in technology | TTÜ Käär H. | high techn. relevance in Estonia, further development potential low. Mark | cooperation with specialists abroad, area for Estonia important | 5-3-3 | 5.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | 4-2-1 | | | |
| 61 | Elaboration of technology for using of domestic & cheap solid fuels & renewable sources of energy for heating purposes (since 1988) | TTÜ Keerov V. Vares V. | no orig. work, techn.& econ. relevance may be high, area is important. Mark 2-1-3 | program must be re-focused, coop. with Swedish org. recommended | 4-3-3 | 4.0 |
| 93 | Elaboration of scientific bases, principles & mechanisms for the guidance of Estonian energy management | TEFI Mõtus M. | sci. potential for model developments & appl. high, no publ. intern.journ. Mark 3-2-3 | group should be maintained, intern.publ.& cooper. needed | 3-2-3 | 3.0 |
| 95 | Combustion of low-grade fuels in fluidized bed | TEFI Martins A. | good, problem and competence of group very relevant, publ. output low. Mark 3-3-2 | cooper. with Swedish specialists, publication in intern. journ. recomm | 4-3-2 | 4.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 2.5. Elektrotehnika | | | | | | |
| 206 | Invastigation & diagnostics of power semiconductor devices by the method of registration of infrared recombination radiation | TEFI Rumma K. | not possible, lack of info. Mark 0-0-0 | - | 3-1-1 | 0.0 |
| 347 | Elaboration & development of non-invasive computer-aided methods & equipment for measurement of the main physiological variables in man | TÜ Karu T. Vedru J. | eval.difficult, no intern. publ., group small, no change of success. Mark 0-1-2 | collaboration with Swedish groups recommended | nõus soovitatakse, vajalik integratsioon Eestisse ja rahvusvahelised sidemed | 3.0 |
| 62 | Semiconductor power electronics devices & equipment | TTÜ Velmre E. | appears be of good level. Mark 3-2-2 | for final evaluation direct contacts between Est.& Swedish sci. needed | 4-2-2 | 0.0 |
| 63 | Laser measurement & communication systems | TTÜ Hinrikus H. | not evaluated due to lack of expertise | - | 4-2-2 | 0.0 |
| 64 | Lock-in instrumentation & measurement technology | TTÜ Min M. | papers well written & well-organized, analysis is carefully performed. Mark 3-2-2 | discussions on today´s state and comparision to other works needed | 4-3-3 | 0.0 |
| 65 | Economy of electric energy & electromagnetic compatibility | TTÜ Järvik J. | work is innovative, not university | develop fields of high res. potential | 3-2-2 | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | in electric power equipment | | research. Mark 2-1-2 | which are in project area | | |
| 66 | Computer-controlled linear induction & magnetohydrodynamic (MHO) drives for casting industry | TTÜ Laugis J. | evaluation not possible, lack of info. Mark 0-0-0 | - | 4-2-3 | 0.0 |
| 67 | Experimental determination of parameters of the induction machines | TTÜ Risthein E. | can not be evaluated, research is not of main interest as basic res. Mark 0-1-1 | - | 3-1-1 | 0.0 |
| 90 | Study of D. C. supply for nonlinear electrotechnological group loads | TEFI Tomson T. | not possible, lack of info. Mark 0-0-0 | - | 4-2-2 | 0.0 |
| 91 | Arc plasma jet and cathode investigation | TEFI Pihlak U. Tehver J. | res. field & orientation acceptable, eval. impossible, lack of info. Mark 3-2-2 | intern publ., study cathode surface effects-plasma parameters | 3-2-2 | 0.0 |
| 92 | Synthesis & design of power converters with reduced distortions using optimal energy exchange control | TEFI Sarv N. | theoretical level very high, study area is of great national interest. Mark 4-3-2 | computing power & experimental facilities need support | 3-2-3 | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 2.6. Keemiatehnika | | | | | | |
| 372 | Quantitative description of processes of microbiological synthesis, optimization of processes of microbiological synthesis | KBFI Vilu R. | project of great interest, leader very productive, competent. Mark 3-2-3 | financial support and industrial testing needed | nõus, suund säilitada, finantseerida ETFst | 0.0 |
| 68 | Fundamentals of processing natural phosphates into fertilizers & feed phosphates (in the period 1986-1990) Fundamentals of processing mineral raw materials & industrial wastes (since 1991) (three great areas of investigation) | TTÜ Veiderma M. | proj.1&2 are of very modest level, 3 is more original. Mark 3-1-2 | proceed 1&2 in ind. org. fut. plans focused, res.in other fields should be started | ei ole nõus suund säilitada, finantseerida ETFst, kui võimalik, siis ka mujalt | 0.0 |
| 69 | Applied researches in chemical engineering & environmental engineering (7 projects) | TTÜ Kallas J. Munter R. | good engineering work, no new knowledge about reactions. Mark 0-0-0 | economic aspects of ozonation should be taken into account in practice | 3-3-3 töödel teoreetiline ja rakenduslik tähtsus, head väliskontaktid | 0.0 |
| 94 | Study of interaction between semiconductors & their treating media | TEFI Arro V. | report too general, no quantitative details given, hard to evaluate. Mark 3-3-2 | focus on concrete problem, co-operation with West needed | nõus, teema kaotanud aktuaalsuse objekti kalliduse tõttu raskesti teostatav | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 2.7. Keskkonna- ja ehitustehnika | | | | | | |
| 127 | Radon in dwellings | ETUI<br>Jõgioja E. | not evaluated due to lack of expertise | - | 2-2-3<br>töö aktuaalne<br>P.-Eesti elanike tervise,energia säästuprogr.ja kütte regul. | 0.0 |
| 169 | Serviceability of agricultural buildings | EPMÜ<br>Keskküla T. | has considerable sci.& practical relevance. Mark 3-2-3 | - | nõus, 3,<br>soovitatakse,<br>vajalik rakendus Eestis ja rahvusvahelised sidemed | 0.0 |
| 170 | Elaboration of technological measures for agricultural water pollution control | EPMÜ<br>Maastik A. | evaluation without more info difficult. Mark 0-3-3 | establish cooperation with Swedish institutions | 2-2-2<br>E. põllumaj. jaoks tähtis, vajalik koostöö TTÜ ja Rootsi asutustega | 0.0 |
| 70 | Large span complex space structures | TTÜ<br>Tärno Ü. | sci.potential hard to judge, practical relevance may be high. Mark 3-2-2 | publication in intern. journals needed | nõus, 3<br>integreerida proj.78, on ebapiisavalt tugev ühemehetöö | 0.0 |
| 71 | The development of the construction of universal amperometric oxygen sensors with flexible technology of | TTÜ<br>Marvet R. | technologically competent. Mark 4-3-3 | cooperation with res. org. in environmental and sanitary engineering | 4-3-3<br>tähtis keskkonna seisundi kontrolliks, | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | manufacturing (complex of 3 projects) | | | | hapnikuandur konkurentsivõimeline | |
| 72 | Traffic & transportation organization problems | TTÜ Segerkrantz V. | sci.& practically relevant, has considerable potential. Mark 3-3-3 | contacts with Swedish institutions would be benefitial | 3-3-3 töö väärib jätkamist | 0.0 |
| 73 | Investigation of invironmental engineering problem related to the reduction & control of pollution load to the Baltic Sea, atmosphere & surface waters of Estonia (a complex of projects) | TTÜ Velner H. | lab functions well,signif. for Est. results, evaluate res. quality difficult. Mark 3-2-2 | concentrate on sci., intern. publishing, more detailed planning needed | 4-3-3 Finants. fund.täielikult ETFst, vajal. koostöö Mere-Okol.-ja ZBI-ga | 0.0 |
| 78 | Lightweight & spatial structures | TTÜ Kulbach V. Rattasepp Mang H. | only one intern. publ. of good quality, others impossible evaluate. Mark 0-0-0 | send researchers to Western res. centers | ei ole nõus, 3-4 Eestile vajalik, tungivalt soovitada, vajalikud rahvusvah.publ | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 2.8. Süsteemtehnika ja informaatika | | | | | | |
| 192 | Computing science (4 projects) | KüB.I<br>Tõugu E. Penjam<br>J. Matskin M.<br>Mints G. Tammet<br>T. | excellent, both - basic res.& applicat. of highest intern. standards. Mark 5-3-3 | continue basic res., generate spin-off comp., phonetic gr.-new direct. | nõus, 5-3-3 | 0.0 |
| 324 | Information system design & implementation<br>Computer compilers<br>User-friendly syntax<br>Computers in education<br>Expert systems & software testing<br>Quick methods of data analysis & machine learning<br>Hypertext systems & intelligent university<br>(hinnatud 3 pr.) | TTÜ<br>Võhandu L.<br>Vooglaid A.<br>Henno J.<br>Tepandi J. | 4-3-3<br>data analysis & machine learning is significant basic res. topic, but there are no proper publ. | prolog system's work & inform. systems expertise better used in a software & consult.comp. | nõus firmade loomisega<br>a - 3-3-3<br>b - 4-2-3<br>c - 4-2-3<br>d - 4-3-3<br>e - 4-2-3 | 0.0 |
| 37 | Control systems (7 alaprojekti, hinnatud 5,6,7, hindamata 2,3,4) | KüB.I<br>Jaaksoo Ü. | very good techn. compet.nearly excel., but no bas. res. in sect.5-6-7. Mark 4-2-2 | find new direction & strategy | proj.5 - 3-2-2<br>pr.2 - 4-2-3<br>proj.3 - 4-2-3<br>proj.4 - 3-2-2<br>bas. res. pr.2,3,6 | 0.0 |
| 39 | Software engineering (4 projects) | KüB.I<br>Tamm B. Kalja<br>A. Matskin M.<br>Pruuden J.<br>Mõtus L. | development software for ind.- very good, basic res. - good. Mark 4-3-3 | form a software company, continue appl.work<br>encourage basic res. of DESEG | 4-3-3 | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | gr.int.contacts | | |
| 74 | Systems modelling & control-research activities 1980-1990 (7 projects) | TTÜ Aarna O.Sillamaa H. Kukk V. Rüstern E. | sci.output not impress., group too large, appl.& bas.res. goals conflict. Mark 3-1-2 | focus on a much more narrow area | on juba reorg., alles 4 teemat, nende hinne 3-3-3 | 0.0 |
| 75 | Signal processing algorithms & equipment for various fields of radio engineering | TTÜ Heinrichsen V. Arro S. | far below average level, no intern. publicat., equipment not adequate. Mark 2-1-1 | emphahis on theory & methodology, intern. contacts needed | nõus soovitustega,mitte hinnanguga tehn.eksp.hinne 3-2-3,Eesti tööstusele olul. | 0.0 |
| 76 | Research & development of methods for digital systems testing & design (2 projekti) | TTÜ Ubar R. | AG-technique seems useful, FTGEN may have potent. of intern.acceptance. Mark 4-3-3, 2-3-2 | continue TEST DESIGN project in coop. with Sweden, support needed | Test Design 5-3-3, suur rahvusvah. autoriteet Decomp. methods - 2-3-2 | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 2.9. Masina- ja aparaadiehitus | | | | | | |
| 128 | History of architecture & town building in Estonia | ETUI Bruns D. | not evaluated due to lack of expertise | - | Jätkata "Arhitektuuri kroonika" väljaandmist, taotleda sihtfinantseerimist | 0.0 |
| 77 | CAD/CAM systems, process & factory automation | TTÜ Küttner R. | sci. output good, not clear whether results are applied in practice. Mark 3-2-2 | correct judgement was not possible | tehnika eksp.- 4 kindlasti jätkata | 3.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 3.1. Geoloogia | | | | | | |
| 194 | Deep geology of the southern slope of the Baltic Shield | EGK<br>Puura V.<br>Petersell V. | | | | 0.0 |
| 195 | Soil geochemistry of Estonia | EGK<br>Petersell V.<br>Kivisilla J. | fair, no publications | continuation of monitoring strongly recomm., collaboration developed | Finantseerida Keskkonnafondist või Geol.Keskusest, geol.hinnang -kesine, soovit. | 0.0 |
| 210 | Oocyte maturation, fertilization & embryonic development of bisexual & unisexual vertebrates (cyclostomes, fiches & amphibians) | TÜ<br>Saat T. Tambets J. Vaino V. | fair, lack of ongoing basic res. | reorientation should be encouraged | | 0.0 |
| 294-1 | Paleozoic geology (paleontology, stratigraphy, litology, facies analysis)(several projects) | GI<br>Kaljo D. Rubel M. Pirrus E.etc. | fair to good might have a key role in underst-ing of global events | structural reorg.needed experience of scientists must not be wasted | Pr.1,2-hea-suurepärane, tungivalt soovit.,3-hea, tungivalt soovit.,4-hea,soovit. | 0.0 |
| 294-2 | Quaternary geology (lithology, stratigraphy, geomorphology, palaeogeography) & marine geology (several projects) | GI<br>Raukas A. Vaikmäe R. Rajamäe R. Hütt G. etc. | bas.res.-good appl.- important for Est. isotopes Tall.-good,Tartu-not | bas.res.-reorg.group appl.-finances EGC isotopes- close Tartu | Pr.1-hea-v.hea,tungiv.soovit.2-kesine-hea,osal.soov.3-hea-surep.tungiv.soovit. | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 294-3 | Hydrosphere studies & geochronology | GI<br>Vallner L.<br>Vaikmae R.<br>Rajamae R. Hutt G. | fair, direction of research important for Estonia | strongly recomm., work better organized, intern. contacts increased | Finants.ETFst lõpetada, formeerida GI+ KübI uus rühm geol.eksp.- hea, soovit. | 1.0 |
| 294-4 | Geology of useful minerals (4 projects) | GI<br>Puura V.<br>Sildvee H.<br>Kiipli T. | oil shale-no basic res.precambrian-good geophysics-good | 1-orientate on basic res.2-support recomm.3-significant for future | Pr.1 kesine-hea,osal.soovit.2-hea-v.hea,tungiv.soovit.3-kesine-hea,osal.soovit. | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 3.2. Ökoloogia | | | | | | |
| 118 | Investigation of the chemical composition of dictyonema argillites, their behaviour & possibilities of their utilization in the mining process of phosphorites | KI<br>Palvadre R. | fair, work descriptive, should be conducted in collab. with oil shale res. | not recommended | Gr.2, suund säilitada, finantseerida ETFst vähendatud mahus | 1.0 |
| 193 | Studing of regime, underground water balance & exogenous geological processes, estimation & forecasting of geological conditions in Estonia | EGK<br>Savitsky L. | fair, monitoring network impressive but techn. resources inadequate | strongly recomm.,monitoring activities should be integrated & coord. | finantseerida teistest allikatest (Keskkonnafondist, Geol.Keskus) geol.-fair | 0.0 |
| 208 | Air pollution impact on coniferous forests in Estonia | TÜ<br>Frey T. Kask P. Lohmus K. Oja T. Sellin A. | good-very good | support strongly recomm.,objectives of future long-term res. clarified | Finants. osal. ETFst, osal.(monitooring) Keskkonnafondist | 0.0 |
| 211 | Systematics, faunistics & ecology of some invertebrate & vertebrate taxa in Estonia (6 projects) | TÜ<br>Põldvere K. Saat T. Kirk A. Kesskula T. Ling R.etc | fair, project should be split into subproj.and evaluated separately | support not recomm. in present form of proj. except salaries | | 0.0 |
| 216 | Dynamics & structure of the plant communities in boreonemoral zone (6 projects) | TÜ<br>Trass H. Aaviksoo K. Kont A. Kukk E. Laara E etc. | Proj.1-3 very good, 4-5 very good, 6-fair-good | Support to proj.1-5 most strongly recomm., 6-recommended | Pr.1,6 liita ZBI töödega, pr.2-5 finants.täielikult ETFst, pr.3-viia Okol.Inst. | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 217 | Insect ecophysiology & biological machanism of insect pest control | ZBI<br>Maavara V.<br>Kuusik A.<br>Metspalu L.<br>Hiiesaar K.<br>etc. | good, promising results, group inventive in developm. of equipment | increased support, concentration on well-defined physiol.questions recomm. | nõus | 0.0 |
| 218 | Biology of birds of Estonia (3 projects) | ZBI<br>Mänd R.<br>Keskpaik J.<br>Lilleleht V.<br>Renno O.<br>Veromann | population proj.-very good, migration-good-very good, mapping-the same | support 1-most strongly recomm., 2-strongly, 3-from applied funds too | pr.1 täielikult finants. ETFst, | 0.0 |
| 219 | Application of the radiocarbon method in the studies of the history of nature & culture | ZBI<br>Liiva A. Ilves E. | Lisaks olul. geol. ja arheol. proj. teeb baasuuringuid atmosfääri 14C variats. alal, vanemad dateeringud mitteusaldatavad | sulgeda Tartu labor | laborit kasutada õppetöös, säilitada, otsida finants., personali noorendada | 0.0 |
| 220 | Hydrobiology, management & protection of inland water bodies (5 projects) | ZBI<br>Timm T. Simm H.<br>Haberman H. | A.-good,Timm very good<br>B.-?<br>C.-fair<br>D.- plans very good<br>E.-?. | A. use statist. meth.+support,integr. B.<br>C- no funding<br>D- strongly rec | | 0.0 |
| 225 | Coenology, ecophysiology & population ecology of plants in communities under ecological management (four projects) | ZBI<br>Kull K. Elvisto T. Koppel A. Paal J. Pihlik U. etc | Proj.A1-good-very good, A2-very good,B-good-very good, C-fair-good | A1,A2- most strongly recomm.,B a,b-strongly recomm., C-strongly recomm. | A pr.1,2 ja B pr.1,2 finants.täielikult ETFst, C - finants. teistest allikatest | 0.0 |
| 23-1 | Leaf photosynthesis & influence of ozone on plant productivity limitation and regulation of leaf photosynthesis | AAI<br>Laisk A. Oja V. Eichelmann H. Gerst U. Ramma H. | excellent, theoretically well based, experim. original, intern.leading | most strongly recomm.,contacts & equipment needed | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 267 | Structural & functional organization & anthropogenic dynamics of terrestrial ecosystems (2 projects) | ÖMI<br>Punning J.-M.<br>Mandre M.<br>Ilomets M. | good - very good | project 1- most strongly recommended, 2- recomm./strongly recomm. | Pr. 1 ja 2 finantseerida täielikult ETFst | 0.0 |
| 270 | Air pollution effects on vegetation, including forest ecosystems | TSUL<br>Martin J. Noble R. | lab is building up its organization, seems to work with monitoring, no evaluated | contacts with Forest Res. Inst. in Tartu & neighbour countries org-s needed | | 0.0 |
| 270-1 | Arctic & boreal bioaccumulation of anthropogenic airborne contaminants | TSUL<br>Martin J. Noble R. | no answer | | | 0.0 |
| 272 | Ecochemicals for plants: Pheromone materials for pest monitoring and male insect mass trapping | EPMÜ<br>Nilson A.<br>Mõttus E. | theoretical, dealing with methodologies, competent, mainly regional importance, Estonia has played important role in this res. | money should not limit this work, should be promoted | nõus | 3.0 |
| 275 | Elaboration of GIS for landscape ecological research & territorial management, since 1986 | TÜ<br>Roosaare J.<br>Mander Ü. et al. | theoretically & methodologically important res., group creative, skilful, enthusiastic | collab.other institutions get data for models, should receive priority | nõus | 4.0 |
| 315 | Ecochemicals for plant. Protection management (Pheromone communication of insects as part of chemical communication in ecosystems. Synergistic effects and isolation mechanisms in pheromone communication) | TÜ<br>Mõttus E. | high sci. value, theoretical & dealing with analytical methodologies | make in-depth external review of projects impact on Est. horticulture | nõus | 4.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 330 | Applied research works of indoor air & disinfection of agricultural rooms. Water pollution control & utilization of wastes | TÜ<br>Priiman R.<br>Visnapuu L.<br>Avaste O. | | | | 0.0 |
| 371 | Technology-related & natural environmental pollution studies | KBFI<br>Lippmaa E.<br>Pihlak A. Sirk A. | good, mobile air monitoring system very good, basic & applied combined | continued monitoring is strongly recomm., coord. in Estonia & intern. | Finantseerida osaliselt ETFst, osal.teistest allikatest (kui ei saa, siis ETFst) | 0.0 |
| 502 | Energetics of ant colonies | ZBI<br>Maavara V. | project would not meet international criteria | not recommended | | 0.0 |
| 82 | Urban ecology (2 projects) | TBA<br>Tarand A.<br>Kangur A.<br>Eensaar A. Liiv S. Normet T. | poor - fair, aims not clear, no intern. publ. | reorg. group, no funding except salaries recomm.,cooper.on heavy metals | osaliselt finantseerida ETFst,tööd jätkata Geol.Inst.'s, monitooring finants KKF | 0.0 |
| 83 | Introduction & acclimatization of ornamental plants | TBA<br>Karis H. | collection is unique | concentrate more on Est. conditions & needs, intern. contacts needed | | 0.0 |
| 84 | The formation of primary productivity & of factors influencing it in extreme conditions (lakes & seabays of Antarctic oases) | TBA<br>Kaup E.<br>Loopmann A. | good- very good,results desciptive but very interesting | intern.cooper., if not possible, turn to problems at home | Finantseerida rahvusvaheliste programmide kaudu | 0.0 |
| 85 | Landscape ecology | TBA<br>Ratas U.<br>Nilsson E.<br>Kannukene L.<br>Puurman E. etc. | good, of importance to the MAB program of Estonia | recomm./strongly recomm.to support, coop.& intern.publishing reccomm. | Täielikult finantseerida ETF-st, üle viia Okol. Instituuti | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 3.3. Taksonoomia ja tsönoloogia | | | | | | |
| 212 | Local lichen floras, mapping of threatened species & theoretical problems of lichen conservation | TÜ Trass H. | of great importance | of very high priority | nõus | 0.0 |
| 213 | Taxonomical & chemosystematical studies of some lichen families (Parmeliaceae, Pyxinaceae) | TÜ Trass H. | | | hinnang andmata | 0.0 |
| 214 | Paradigm changes in the development of vegetation science & the role of certain outstanding botanists & leading geobotanical schools in the history of this science | TÜ Trass H. | | | hinnang andmata, töö väikesemahuline | 0.0 |
| 215 | Classification of plant communities of Estonia, the syntaxonomy of which is still not sufficiently clear | TÜ Trass H. | | | hindamata, temaatika väga oluline | 0.0 |
| 223 | Taxonomy, evolution & distribution of fungi (a complex of projects) | ZBI Parmasto E. Kalamees K. Kollom A. Raitviir A. etc. | very good, subprojects fair-excellent, group most vital | most strongly recommended, intern. contacts needed | nõus | 0.0 |
| 224 | Taxonomy & protection of | ZBI | fair, of national | support for | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | baltic higher plants | Kuusk V. Leht M. Kuul T. | interest, group efficient | finishing subprojects, redirection tow. analyt.work needed | | |
| 226 | Isoenzyme variation & phylogenetic relationship in selected grass & legume genera | ZBI Jaaska V. | very good, published intern.,group is vulnerable | strongly recommended, collaboraation+young researchers+computer needed | nõus | 0.0 |
| 227 | Plant nematology: taxonomy, ecology & evolution of plant parasitic nematodes including host-parasite relationships & theoretical aspects of control | ZBI Krall E. Rah M. | very good, prospects are good, very high intern. standard | support strongly recomm., project should be directed tow.phylogeny | nõus | 4.5 |
| 228 | Faunistics, systematics, & biogeography of some groups of insects in Estonia & adjacent areas | ZBI Viidalepp J. Elberg K. Remm K. | fair, of limited interest outside Estonia | no support (besides salaries), more analyt.approach & modern methods | suuna edasine finantseerimine oluline, projekt vajab muutmist | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 3.4. Geneetika, füsioloogia ja mikrobioloogia | | | | | | |
| 207 | Regulation of utilization of carbon compounds in microorganisms growing in mixotrophic conditions | TÜ Simisker J. Alamae T. Koiveer R. Sild V. Teugjas H | fair-good, genetic analysis poor, lack of equipment, no intern.public. | support recomm., teaching load reduced, new equipment, intern.publish | | 0.0 |
| 209 | The physiology & biochemistry of lignification (1986-1990) | TY Miidla H. Padu E. Simisker J. Hansen E. Tänav A. | fair, investigations done competently, problem important | support recomm., anal.equipment, decreasing of teach.load needed | nõus | 0.0 |
| 271 | Intracellular host-parasite interactions (two projects) | EBI Teras J. Metsis A. Kazakova I. Kesa L. Sardis H. | virus-protozoan project - fair, coccidia - good, lab. conditions poor | not recommended under present cond., modern mol.biol. methods needed | protesti ja soovitusi ei vaidluustatud, EBI oma seisukohta ei andnud | 0.0 |
| 273 | Parameters of the reaction system of photosynthetic carbon metabolism in vivo | EBI Keerberg O. Viil J. Parnik T Keerberg H. Ivanova H | good, have intern. publications, original gas exchange equipment constr. | strongly recommended, more biochem.anal and younger researchers recomm | nõus | 0.0 |
| 277 | Biologically active fractions of lymph tissue & their roles in the organisms affected by irradiation | EBI Kööp T. | gr3 - unsufficient quality | not recomm. | nõus | 0.0 |
| 278 | Biosynthesis of flavonoids, | EBI | fair | recommended, more | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | control mechanisms &relationship with primary metabolism | Margna U. Tohver A. Laanest L. Vainjarv T. etc. | | advanced approach & equipment & young staff needed | | |
| 281 | Hormonal regulation of lymph formation & haemolymphomicrocirculator | EBI Ainson H. Ainson E. Kuus H. Vaiga J. Poder O. etc. | poor, lack of theor. models, anal.methods, intern. public. | not recommended | nõus, protest väheveenev, EBI oma seisukohta ei andnud | 0.0 |
| 282 | Biosynthesis of phytoviruses in solanaceae & the problem of plant susceptibility/resistance | EBI Agur M. | group has key function in Estonia, great importance, hypotesis of endogen. viruses - questionable | maintain the group, validity of proofs of the hypothesis needs testing | nõus | 2.5 |
| 283 | Genomic influences in elementary recombination & mutagenesis (4 projects) | EBI Toompuu O. Jarve K. Kaldma J. Tamm S. Veskimets K. | two proj.-good, two-fair, they lack obvious direction | support rec.for T4 & transposon proj., not rec.for rho-mutat. & DNA repair proj.. | nõus | 0.0 |
| 284 | Chromosomal organization, intergenomic relations & biochemical features in induced mutants & wide hybrids of wheat & its relatives | EBI Priilinn O. | theoretical, dealing with methodologies, high quality, has many merits, intern. contacts are increasing | review mutant work, cooper. Agr. Univ., new anal. equipment needed | nõus (põllumaj. eksp.) | 4.0 |
| 370 | Regulatory processes in human cardiovascular system (especially in blood pressure level & rhythms under physical, postural & emotional loads) in health & in disease | TÜ Epler M. Reeben V. Raamat R. | med.sciences gr.2,no intern.publ.,methodology questionable | project important | biol.eksp.: nõus | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 3.5. Molekulaarbioloogia | | | | | | |
| 333 | Investigation of macromolecular structure by atomic models | TY Mikelsaar R.-H. | no future, doesn´t stay the competition | should be self-funding, used in basic teach., retain Mikelsaars salary | Gr.3, otsida finantseerimist mujalt | 0.0 |
| 351 | Molecular biology of potato viruses | EBK Saarma M. | high internat. standing, high competence & experience | | nõus vt. projekt 360, sama | 4.0 |
| 352 | Isolation & characterization of biologically active compounds, enzyme kinetics & mechanism, use of enzymes in synthesis | KBFI Haga M. Siigur J. | past production & res. facilities good but res. unfocussed & superficial | supp.only enzymatic probl.of conceptual interest, reorg.lab.reevaluate proj. | Gr.2, säilitada ensüm.peptiidsüntees , finants. ETFst, muu restrukt. biol.eksp.-2 | 3.0 |
| 353 | Structure & function of the mammalian LINE retroposons | EBK, TÜ Speek M. Ilves H. Kahre O. Kaldma K. Meier R. | very good, questions scientifically sound, published in intern. journ. | most strongly recommended | nõus | 0.0 |
| 354 | Studies on molecular mechanism of functioning of oncoprotein p53 | EBK, TÜ Maimets T. Remm M. Peterson P. Vastrik I. Ilves I. | very good | support most strongly recomm., group could be larger, find own profile | nõus | 0.0 |
| 355 | Cloning of the human ribosomal | EBK | very good, group | support strongly | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | protein genes | Metspalu A. Rebane A. Pata I. Annilo T. | well structured, has good contacts with teach. & researches in other countries | recommended, group should concentrate on ribosomes | | |
| 356 | Construction of inducible eukaryotic expression vectors | EBK, TÜ Ustav M. Kilk A. Soosaar A. Laan M. | fair, no international publications | support is questionable, maybe only for local expertise | nõus | 0.0 |
| 357 | Cloning, characterization & expression of prochymosin genes | EBK Örd T. Kolmer M. Tomson K. Torp A. Piiper J. Toots | good | group must terminate the project, then be submitted to evaluation | nõus | 0.0 |
| 358 | Identification of genes involved in growth autonomy (serum factor-independent growth) of human hematopoietic cells | EBK,TÜ Anton R. Põld P. Torp A. Sedman T. Pooga M. | good, high technical quality, group suffers from absence of leadership | support is recommended, re-evaluate after return of the leader | nõus | 0.0 |
| 359 | Molecular biology of bovine & human papilloma viruses | EBK Ustav M. Remm M. Sedman J. Abroi A. Västrik I. | lipid peroxidation-good, virus replication-very high standard | support recommended | nõus | 0.0 |
| 360 | Molecular biology of potato viruses & studies on their resistance | KBFI Saarma M. Kelve M. | very good as applied research, good-very good as a basic project, high internat. standing | support strongly recommended | nõus | 0.0 |
| 361 | Molecular & cellular mechanisms of action of nerve growth factor (NGF) & factors related to NGF (two projects) | KBFI Saarma M. Laasberg T. Siigur J. | excellent, promising for future, top international visibility | support most strongly recomm., viper NGF project should be terminated | nõus | 0.0 |
| 362 | Structure & function of ribosomal peptidyltransferase, | EBK Villems R. | very good, work on scientific | support most strongly recomm., | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | decoding & ribosome assambly | Remme J. Sarapu T. Saarma U. Margus T. | front-line | genetic & physiol.anal. mutants desirable | | |
| 363 | Isolation & characterization of the plasmid-encoded genes for phenol degradation. Studies on the mechanism of gene activation in Pseudomonas putida | EBK Kivisaar M. Nurk A. Kasak L. Steinberg N. | very good, high quality, published in intern. journ.,has high potens. | support most strongly recommended, to back applied projects as well | nõus | 0.0 |
| 364 | Molecular characterization of 2,4-D plasmids in local bacterial isolates | EBK, TÜ Mäe A. Heinaru A. | good, no intern. publications | support recommended | nõus | 0.0 |
| 365 | Transposon-mediated mobilization of cam (camphor) & oct (octane) plasmids by transposons of degradative plasmids | EBK, TÜ Heinaru A. Nurk A. Mae E. Aavik E. Krinka D.Tamm A | very good | support is most strongly recommended, field is important for ecology | nõs | 0.0 |
| 366 | Applied projects. A short description of the objects, a summary of the results & prognosis of the future development of the projects (four pro- jects) | EBK, TÜ Heinaru A. Mäe A. Nurk A. Habicht E. Kivisaar M. | good, several applications seem promising | recommended to support to strenghten basic research | nõus | 0.0 |
| 367 | Genetic patterns of plant cell & tissue cultures in Vitro | TÜ Kallak H. | not evaluated | | tõenäoline hinnang 3 | 0.0 |
| 368 | Role of lysosomes in early development & in tissue differentiation in vivo & in vitro | EBK, TÜ Kärner J. Raid R. Saat T. | fair, no intern.publications, future plans not clear | support not recomm., ally with other groups | nõus | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 3.6. Orgaaniline keemia | | | | | | |
| 110 | Chemistry & geochemistry of oil shales. Fundamentals of oil-shale & shale oil processing (several projects) | KI Mölder L. Teder J. Urov K. Bondar E. Tamvelius I. | very good - excellent, basic & appl. combined, important for Estonia | strongly recommended | Gr.1, säilitada suund, finantseerida ETFst | 4.0 |
| 111 | Search for, synthesis & actions of polyenic acid metabolites & related compounds | KI Lille Ü. | gr1 - resonable scientific quality | adequate support in the future | Gr.1, säilitada suund, finantseerida ETFst | 5.0 |
| 112 | Fundamental of environmental chemistry & methods for evaluating environment pollution | KI (KBFI) Kirso U. Bogdanov A. Irha N. Uibopuu H. | very good, many intern. publications, esp. photooxidation research | most strongly recommended to support | Gr.1, finants. ETFst (ökol. alt), koordineerida Mereinstituudiga | 4.0 |
| 113 | Sythetic development of the technology of new ecologically safe plant protection means (retardants, fungicides, pheromones, juvenoids) & fragrances | KI Lääts K. | | | ei hinnatud | 0.0 |
| 114 | Synthesis & development of the technology of surfactants on the basis of fat & ptotein wastes. Surfactants of biological interest | KI Kuusk A. Jõers J. | low international visibility, phys.-chem. knowledge low | support must come from industrial resources | Gr.3, finantseerida muudest allikatest | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 115 | Electrophilic haloalkylation of alkenes as the basic process for synthesis of biologically active terpenoids | KI<br>Lääts K. Siirde K. Erm A. Rang H. Kirjanen I. etc. | work is conventional | group must be reorgan. & supported by industry, participate in teach. | Gr.2, vähendada rühma koosseisu ja finantseerimist ETFst, restrukt. temaatikat | 2.0 |
| 116 | Optimization of chemical & mass transfer processes using oscillating temperature | KI<br>Rajalo G.<br>Kirjanen I. | good, methods are relevant | support from st. budg.50%, from ind.50% is relevant, contin.support recommended | Gr.1, säilitada suund ja finantseerimine ETFst | 3.0 |
| 117 | Asymmetric chemical synthesis. Development & investigation of chirons for medicinal & natural product chemistry | KI<br>Lopp M. Kanger T. | good, leader competent | support strongly recommended, group should be involved into teaching | Gr.1, säilitada suund ja finantseerimine ETFst | 3.0 |
| 120 | Investigation, use & preservation of Estonian curative muds | KI<br>Lopp M. Arro J. | gr3 - insuff. quality, chem. descript.of muds has no medical interest | not recomm. | Gr.1, finantseerida 1993.a., siis tulemused läbi vaadata | 0.0 |
| 122 | Synthesis & physicochemical fundamentals of purification of unsaturated hydrocarbons & aroma compounds | KI<br>Kann J. Rang S. Siimer E. Kirss H. Kudrjavtseva L. | structural change is necessary | parts of the proj.must be evaluated in detail, support only the best | Gr.2, vähendada rühma koosseisu, tegeleda GCMS tehnika kasutamisega | 1.0 |
| 266 | Quantitative experimental, theoretical, informatical & calculative-prognosing approach to the structural & environmental effects on the reactivity (rate & equilibrium constants) & formation enthalpies of organic compounds | TÜ<br>Palm V. Kiho J. Nummert V. Koppel I. Koppel J. | fair, not convinced of the importance | support to finish data base project, further work needs evaluation | Gr.1, finantseerida ETFst 1993.a., siis otsustada töö jätkamine | 1.0 |
| 289 | Synthesis of pheromone compounds, elaboration of pheromone materials | TÜ<br>Timotheus H. Rodima T. | fair,not recognized intern. established methods used | support from industry recomm., part of the group | Gr.3, otsida finantseerimist väljaspoolt ETF | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | involve into teaching | | |
| 291 | Investigation of synthetic methods for biologically active compounds | TÜ<br>Mäeorg Ü. | good | continued support recomm., encourage the methodology project (Zn-Cu) | Gr.1, säilitada suund ja finantseerimine ETFst | 3.0 |
| 292 | Investigation of methods for separation, purification & analysis of lectins & blood plasma proteins | TÜ<br>Püssa T. | contain very little basic science, no original results | support cannot be recommended, change of field should be encouraged | Gr.3, otsida finantseerimist mujalt | 0.0 |
| 341 | Experimental & theoretical investigation of structural & solvent effects an acid-base equilibria in gas phase & solution | TÜ<br>Koppel I. | very good, caliber of work is high | support most strongly rec., computer IBM RS/6000 needed | nõus | 0.0 |
| 44 | Development of highly reactive cold setting polycondensation resins | TTÜ<br>Kaps T.<br>Christjanson P.<br>Suurpere A.<br>Lippmaa H. | good | good support, involve group into education & industrial collaboration | Gr.1, säilitada suund ja finantseerimine ETFst | 3.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 3.7. Füüsikaline, analüütiline ja anorgaaniline keemia | | | | | | |
| 119 | Development & modification of the ion chromatographic technique for evaluating the environmental pollution | KI<br>Haldna U. Luiga P. Rajur K. Trapido M. Pentschuk J | project purely technical, number of publ. small, out of eval.scope | support recomm. to retain and develop national competence in ion-chromatography | ökol.eksperdid-finants. KK või Innov.fondist keemiaeksperdid-finants. ETFst | 3.0 |
| 123 | Protonation of weak organic bases in aqueous acids | KI<br>Haldna U. | poor, we cannot identify significant research problems | limited support, group must be reorganized | Gr.3,arvestades protesti säilitada suund, vähendada finantseerimist ETFst | 0.0 |
| 124 | Computerized chromatographic analysis of nonstationary substance flows | KI<br>Kaljurand M. | very good, highly competent, results published intern. | strongly recommended, group could be larger, equipment modernized | Gr.1, säilitada suund ja finantseerimine ETFst | 4.0 |
| 145 | Investigation of medium effects on chemical structure & reactivity | TÜ<br>Karelson M. | good intern. standard, very promising future | support rec., improve computer facilities, collab.I.Koppel (341) | Gr.1, säilitada uurimissuund, finantseerida ETFst | 3.0 |
| 285 | Investigation of the main characteristics of the interfacial structure & adsorption at the surfaces with electronic & ionic conductivity. Development of the quantitative models of | TÜ<br>Lust E. | low, experimental setup is conventional | reduction of personnel & support, efficient leadership needed | Gr.2, säilitada uurimissuund, vähendada rühma koosseisu | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | electrode surface | | | | | |
| 286 | Electroanalytical methods & complex systems for testing oxygen content,pH & polluting components of environment | TÜ<br>Tenno T. Keis H. | good, competent,productivity is high | increased support needed, production of electrodes - to a separ. company | Gr.1,säilit.suund ja finants.ETFst, kommertsialiseerimis eks toetus Innov.Fondist | 3.0 |
| 287 | Electrosynthesis & properties of the analytically active conducting polymer films | TÜ<br>Tamm J. | prognosis very uncertain, Dr. Tamm is competent | support & personnel should be reduced, equipment needs NO investments | Gr.2, säilitada uurimissuund, vähendada rühma koosseisu | 1.0 |
| 288 | Specificity & mechanism of action of enzymes & receptors | TÜ<br>Järv J. Pinken A. Langel U. | very good intern. standard, problems very significant | support most strongly recommended, proper equipment & lab. space needed | Gr.1, säilitada suund ja finantseerimine ETFst | 4.0 |
| 290 | Experimental & theoretical investigation of electronic structure & reactivity of neutral molecules & ions in gas phase & solution | TÜ<br>Koppel I. | | | Gr.1, säilitada uurimissuund, finantseerida ETFst | 4.0 |
| 45 | Background of heavy metals in the environment of Estonia-methods & chemical monitoring | TTÜ<br>Hõdrejärv H. | low, standard methods with out-of-date equipment used | attach the group to a govern. lab, collabor. with other spec.needed | Gr.3, nõus, otsida finantseerimist teistest allikatest | 1.0 |
| 46 | Electronic & atomic processes in semiconductors | TTÜ<br>Kukk P.<br>Mellikov,E.<br>Opik, A. | poor, productivity very low | reorg.& reduction of personnel,collab.with ind.lab.& companies abroad rec. | tehn.eksp:nõus,2-2-1 ,teemat jätkata,aktualiseeri da,rühm reorg.leida Eesti klient | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 3.8. Mereuuringud | | | | | | |
| 221 | Biota of the Baltic Sea ecosystem, variability of the plankton & benthos, bioindication of the state of the ecosystem & eutrophication | ZBI Järvekülg A. Trei T. | good- very good, researchers intern. well known, faunistic compet.excellent | increse mater. supp., use statist. methods, publish intern. | Pr.A,D finants.ETF-st täielikult, B,E liita pr.A, finants. osaliselt, C - mujalt | 0.0 |
| 268 | Investigation of the Baltic Sea ecosystem, creation of scientific basis for its protection & exploitation (4 projects) | ÖMI Kukk H. Kahru M. Ojaveer E. Jankovski H. | good, very good-excel., good-very good, good, group dyunamic | support most strongy rec. study as part of ecosyst. strongly supp. | Pr. 1,2 finants. ETF täielikult, 3.4 - osaliselt | 0.0 |
| 521 | Physical oceanography | IECOL Elken J. | good, measuring programmes sci. value high | data analysis & exchange with ICES and use in models for Balt. Sea recomm. | osaliselt finantseerida ETFst | 0.0 |
| 522 | Modelling of marine ecosystems. The state, dynamics and prognoses of the Baltic Sea marine environment | IECOL Tamsalu R. | good, techn. base quite satisfactory | diagnostic & prognostic models for eddies, circul.& exchange studies rec.. | osaliselt finantseerida ETFst | 0.0 |
| 523 | Long term changes and local environmental situation in the Baltic Sea, especially in Estonian costal areas, and their forecast as a problem of | IECOL Aitsam A. | excellent, but results not directly applicable to protecting Balt.Sea | employ Aitsam in sci., his future res. proposal not fully acceptable | | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | interaction of different scale ecological, hydrophysical and biological processes | | | | | |
| 524 | Water protection: techn.investig.,aiming at limiting the use of freshwater by major industries,their waste products<br>quality formation of surface waters<br>methods for pollution load evaluation<br>pollution flows between land,sea and atm.<br>water quality criteria | TTÜ<br>Velner H.<br>Toompuu A. | good-very good, quality of chem. work is top ranked | continue support, pollution flows study strenghtened, basic res. developed | täielikult finantseerida ETFst | 0.0 |
| 88 | Elaboration of an optical apparatus for "in situ" measurements in the Marine optics and remote sensing (several projects) | TEFI<br>Laesson L.<br>Arst H.<br>Kahru M. | good, method interest., facil. for satellite remote sensing missing | ensure Dr. Kahru a strong position, combine methods | osaliselt finantseerida ETFst | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 4.1. Tervishoid | | | | | | |
| 129 | Environmental mutagens & carcinogens in Estonia | EKMI Veidebaum T. | group one, good intern. standard, results of gener.interest, methods relevant | funding strongly recommended | Gr.1, nõus | 0.0 |
| 130 | Early diagnosis of the effects of toxic substances on the organism | EKMI Kahn H. | group one, is of general interest, results may be imp. for Estonia | funding strongly recommended, priority rating not possible | nõus | 0.0 |
| 133 | Hygienic conditions in oil shale & furniture industries, risk factors & their influence on the workers health | EKMI Jaakmees V. | group three, methods are not adequate | may be of importance for Estonia, studies should be pursued | nõus (ei ole prioriteetne) | 0.0 |
| 135 | Biostatistics & epidemiology, cancer registration , statistics & epidemiology | EKMI Rahu M. | group one, projects & methodology are interesting, sci.level v.good | high priority funding needed | nõus, finantseerida | 0.0 |
| 231 | Study of Estonia population´s health depending on ecological factors | PMTUI Teoste M. Silla R. | group three, scientifically uninteresting, methodology inadequate | absolutely not be pursued | üldse ei ole nõus, Eesti jaoks on töö oluline | 0.0 |
| 232 | Main scientific direction - the study of hereditary factors determining physical | PMTUI Schwarz V. | group 3,scientifically uninteresting, | absolutely not be pursued | ei ole nõus, kuigi kahtleme | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | working capacity (PWC) & sport abilities of children & adolescents by means of classical methods of human genetics (twin, family & longitudinal methods) | | methodology inadequate | | | |
| 233 | Elaboration of methodological basis for the improvement of health service for the population taking into consideration the regional hygienic situation & susceptibility of different groups of population to the environmental pollution | PMTUI Etlin S. Redko L. | poor, scientific. uninteresting, methodology inadequate, rather gr.3 | absolutely not pursued | ei ole nõus, Eesti jaoks töö vajalik, seda tuleb jätkata | 0.0 |
| 234 | The study on the influence of the manufacturing of hot asphalt-concrete on the environment & the health of the population in Estonia | PMTUI Povarov A. | group three, scientifically uninteresting | absolutely not be pursued | ei ole nõus | 0.0 |
| 235 | Toxicological-hygienic evaluation of food products from contemporary yield | PMTUI Mitchenkov V. | group one, methodology adequate, solid study | continue support as interesting results are expected | nõus, finantseerida | 0.0 |
| 236 | Sanitary hygienic evaluation of the water in children´s swimming pools & bathing-baches on the basis investigations | PMTUI Birk K. | group 1-2, methodology is adequate, solid study | continue, interesting results expected | nõus, finantseerida | 0.0 |
| 238 | Immuno-epidemiological investigations of the relationship between the increased morbidity with acute respiratory vival inflections in children in the Estonian Republic & factors of | PMTUI Priimägi L. | group 1, methodology is sound, competence high | high priority | nõus | 0.0 |

| | | | | | |
|---|---|---|---|---|---|
| | environmental pollution | | | | |
| 5 | Epidemiology & prevention of cardiovascular diseases | KARDI Volozh O. | not evaluated | group 1, soovitatakse jätkata | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 4.2. Biomeditsiin | | | | | | |
| 121 | Elaboration scientific fundamentals for laser photodynamic therapy, chemistry & biological properties of tetrapyrrole compounds | KI Sevtsuk I. | gr1 -reasonable scientific quality, results are of general interest | none | nõus, finantseerida keemiaeksperdid-gr.1, suund säilitada, finantseerida ETFst | 5.0 |
| 237 | Arboviruses, arbovirus inflections & haemorragic fever with unal syndrome (HFRS) in Estonia | PMTUI Vasilenko V. | Group 1 | continuation recomm. | nõus, finantseerida | 0.0 |
| 239 | Respiratory virus infections, enterovirus infections & since 1988-Rubella & in 1991-Cytomegalovirus infection | PMTUI Subi K. | group 1, methodology is sound | continuation recomm. | nõus, finantseerida | 0.0 |
| 240 | Elaboration of nonspecific preventive measures for acute respiratory viral infections in frequently affected children in day-care centres | PMTUI Priimägi L. | group 1 | continuation recomm. | nõus, finantseerida | 0.0 |
| 241 | Viral hepatitis in Estonia, etiological & age structure of morbidity & the distribution of viral markers among healthy population | PMTUI Stroinovskaja S. Reinaru J. | group 1 | recommended | nõus, finantseerida | 0.0 |
| 242 | Molecular epidemiology of | PMTUI | group 1, very good | continued support | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | human rotavirus in Estonia | Amitina N. | quality, methodology is sound | | | |
| 296 | Experimental & clinical investigation on the effect of Estonian curative muds & their bioactive compounds | EKMI Veinpalu E. | group 3, sci. quality very low,clinical successfulness not proved | use control groups | ei ole nõus, suund vajalik, tulemused pos., jätkata, täiustada kliinil. metood. | 0.0 |
| 327 | The methods & apparatus for measuring the biomechanical properties of biological tissue | TÜ Vain A. | group 2, method is interesting, has clear sci. value | continue, start parallel study with invasive methods | nõus, finantseerida | 0.0 |
| 327 | The methods & apparatus for measuring the biomechanical properties of biological tissue | TÜ Vain A. | group 2, method is of interest | careful registr.& eval. be continued, parallel study with invasive methods | nõus | 0.0 |
| 33 | The obtaining of monoclonal antibodies against neurospecific enolase (NSE) & the elaboration of the system to determine NSE-concentration in the human cerebrospinal fluid | EPBTK Kasesalu J. | group 1, plans have merits | | nõus, finantseerida | 0.0 |
| 336 | Producing of monoclonal antibodies for using in qualitative & quantitative detection of substances & in epitope analysis | TÜ Mikelsaar A.-V. Juronen E. | group 1,clinical part is difficult to judge | should be proceeded | nõus, finantseerida | 0.0 |
| 337 | Medical genetics | TÜ Mikelsaar A.-V. | group 2, of general interest, methods are conventional | use modern molecular genetic techniques | nõus | 0.0 |
| 338 | Investigation of the opportunistic microorganisms causing intestinal microflora imbalance & infections in low | TÜ Mikelsaar M. Ormisson A. | group 3, low level | work itself is significant | ei ole nõus, täiendav välisekspertiis - positiivne | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | resistance patients | | | | | |
| 343 | Autoimmune mechanisms in gastrointestinal & liver diseases | TÜ<br>Uibo R. | group 3 in present form, lacking innov. technol. goals not defined | problems be stimulated, coop. with strong group working monocl.antibod | ei ole nõus, finantseerida, tööd vaja jätkata | 0.0 |
| 345 | The search & selection of strains of lactobacilli needed for correction of lactoflora | TÜ<br>Lenzner A.<br>Lenzner H. | group 2, potentionally very important | the depth of analysis of the mechanisms should be increased | nõus | 0.0 |
| 346 | Structural, functional & molecular changes of cells during induced differentiation & cell activation | TÜ<br>Piirsoo A. | group 1, investigations seem successful | should be proceeded | nõus, finantseerida | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 4.3. Ravimid ja toksikoloogia | | | | | | |
| 243 | Study on the etiology of acute intestional infections in the Estonian SSR & elaboration of specific methods for the identification of pathogenic agents from environmental sourges & body fluids | PMTUI Sudakova R. | no information available | | soovitust ei ole | 0.0 |
| 244 | The asymmetry of free amino acid pool in some regions of rat brain | PMTUI Rakhimov R. | no information available | | Projekt on lõpetatud | 0.0 |
| 316 | New neuroleptic, anxiolytic & nootropic drugs, their mechanism of action | TÜ Allikmets L. | group 1, methodologically competent, questions internationally actual | continued support, cooperation with partners abroad | nõus, finantseerida | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 4.4. Kliiniline meditsiin | | | | | | |
| 131 | Prevalence of bronchialasthma, the problems of its diagnosis & management in Estonia | EKMI Jannus L. | group 2, meth.not novel, studies may provide valuable clinic. data | adequate data on the prevalence of bronch. asthma has to be obtained | nõus | 0.0 |
| 132 | Immunological changes & hormonal response in cancer immunodiagnostics & adjuvant of stomach, breast, lung cancer & melanoma | EKMI Rätsep V. | group 1, is innovative and likely to provide new basic inform. | support recommended | nõus, finantseerida | 0.0 |
| 134 | Morbidity, follow-up & risk-factors of main gastrointestinal diseases in Estonia | EKMI Elshtein N. | group 2, no intern. publications, sci. quality not possible evaluate | | nõus | 0.0 |
| 269 | Scoliosis in children, adolescents & adults (several projects) | ASMTULK Raie R. | group 1, subprojects have reasonable sci. quality, questions important | continue, future purposes should be better described | nõus, finantseerida | 0.0 |
| 295 | Early pericarditis in acute myocardial infarction, thrombolytic therapy, cellular immunity & left ventricular function | TÜ ÜMPRI Uusküla M. | group 2, project interesting & timely, methods adequate | researchers must not split their resources on the behaviour project | nõus | 0.0 |
| 300 | A complexed treatment of acute hematogenous osteomyelitis with Seppo system´s needle | ASMTULK Pihkva L. | group 2, clinical competence good, sci. value doubtful | | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 301 | Surgical treatment of trochanteric fractures of the femur by means of Seppo device | ASMTULK<br>Mõtus J. | group 3, insuff.quality, objective comparision of results impossible | not recommended | nõus | 0.0 |
| 317 | Epidemiology, clinical variants & differentiated treatment of depressive states | TÜ<br>Mehilane L. | group 1, method. is adequate, area is important | contin. is of great interest, preventive strategies must be developed | nõus, finantseerida | 0.0 |
| 334 | Study of the influence of home-produced prostaglandins on blood coagulation & cardiovascular system with the aim to introduce them into the treatment of cardiovascular diseases | TÜ<br>Teesalu R. | group 2, studies are not of major signific., no benefits demonstrated | | nõus | 0.0 |
| 335 | Neuroendocrine status of human organism in extremal conditions (asphyxia, brain injury)<br>Ionic mechanisms of cardiac tissue ischemic depolarization development<br>Elaboration of non-invasive computeraided methods for measurement of physiological variables | TÜ<br>Paju A. | project "a"-group 3, project "b"- group 1 | a- define working hypothesis, b-concentrate on this project | nõus | 0.0 |
| 339 | The investigation of the principles of the disturbances in the immunological system function in rheumatic diseases | TÜ<br>Päi L.<br>Birkenfeldt R. | group 3, lacks focus, very low priority | not recomm. | nõus, mitte finantseerida | 0.0 |
| 340 | Interactions of the immune & endocrine systems in lymphoproliferative diseases | TÜ<br>Everaus H. | group 3 under present conditions, background mat. lacks sci. information | detailed invest. effects of Cimetidine & vitamin A must be performed | ei ole nõus, töö pikaajaline, omab rahvusvahelist resonantsi | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 344 | Hypolactasia - epidemiology & clinical significance | TÜU Tamm A. | group 3, monitoring Est.popul. does not give basic info of the disease | | ei ole nõus, töö pikaajaline, arvestatav rahvusvaheline tunnustus | 0.0 |
| 348 | Research of the mechanisms of development of focal brain lesion in the patients with vascular & traumatic brain damage | TÜ Kaasik A.-E. | group 1, has clear sci. value, competence is high, methods relevant | continue | nõus, finantseerida | 0.0 |
| 6 | Various clinical forms of coronary artery disease: diagnostics, treatment, rehabilitation, long-term prospective follow-up | KARDI Laane P. Kaik J. | gr. 3, methodology is not on intern. front-line | contacts with leading western labs recomm. | ei ole nõus, töösuund vajalik | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 5.1. Mullateadus, agrokeemia, maaparandus | | | | | | |
| 168 | Improvement of the foundations of planning & reconstruction of drainage systems | EPMÜ Alekand K. et al. | work´s quality seems good, teaching load heavy, equipment weak | give priority to basic soil physical res., collab. with EMMTUI | nõus | 3.0 |
| 196 | Improvement of the basis for drainage projects | EMMTUI Tomson H. Soovik E. Tomberg U. | good knowledge, actual & need regional investigations as long as agriculture exists | continue, priority to basic soil physical res., collab. agricult.univ. | nõus | 3.0 |
| 197 | Elaboration of the balanced & economically well-grounded bases of the use of fertilizers | EMMTUI Kevvai L. Kärblane H. Raudväli E. et al. | res. is mostly applied, experim. well kept, great value for the farmers, work important | important that fund.res.can continue & increase, stimul.intern. contacts | nõus | 3.0 |
| 204 | The study of Estonian soils & soil cover, genesis, evolution, taxonomy, geography, cartography, inventory, native & anthropogenic state, land evaluation, soil microbiology | EMMTUI Kask R. | important as a fund.for appl.sc.,main tool is field exp. well performed, activity restricted by too small staff,anal.done in service labs. | several depts should be put togetherto overcome restict of sci.atmosphere | nõus | 2.5 |
| 276 | Stability of microbial | EBI | restricted res.used | activity should | nõus | 3.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | associations in soil & their antropogenic dynamics | Rõõs O. et al. | in good, enthusiastic manner, only soil microb. Dept. | remain & be strenghtened & reorient.in proc.studies | | |
| 545 | Liquid manure application on grassland: the effect of fertilizing on bottomland meadow yield | EMMTUI Kuusiku Exp. Station Viinalass H. | field trial well kept, managed by enthusiastic res., competence and research seem to be suitable | soil analytical work needed, coop. with other institutes | nõus | 3.0 |
| 546 | The effect of fertilizing on bottomland meadow yield | EMMTUI Kuusiku Exp.Stat. Raave L. Viinalass H. | experim. well kept, valuable for interact. betw. crops & soils, P- and K- effects not distinguishable | on analysis of all exp. data decide continuation of experiment | nõus | 3.0 |
| 80 | Influence of prime & repeated limings & systematic application of powdered oil-shale ashes on soil & crop yields | EPMÜ Turbas E. Lauk E. Haak R. | very good knowledge of acid soils, liming is necessary | the radioactive substances must be considered | nõus | 4.0 |
| 81 | Biological productivity, chemical, physical & humus relationships, genesis & recultivation of soils in natural & cultural ecosystems | EPMÜ Reintam L. Kitse E. Kõlli R. et al. | very good impression, competence & knowledge of Est. soils very good, res.fund.& applied, good internat.contacts, theor.of western standard | start fund.res.in mineralogy anal. equipment needed, the best support | nõus | 4.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 5.2. Maaviljelus | | | | | | |
| 155 | Agro-economical evaluation of yield influencing factors | EPMÜ Sukamägi A. | made in one location, models need to be based on many data from a longer period & under well defined conditions | review of results needed for drawing conclus.about the future of proj. | nõus | 0.5 |
| 156 | Investigation of pest population & factors influencing their dynamics | EPMÜ Luik A. | good basic research, very positive impression, good contacts & results | | nõus | 4.0 |
| 157 | Working out agrotechnology of rape in Estonian conditions | EPMÜ Jaama E. Kasearu P. | the study is in line with needs of Est. agriculture | coordinate with EMMTUI, grow separate rape varieties for green-fodder | nõus | 2.0 |
| 158 | An influence of fertilization on the yield & its quality of vegetables | EPMÜ Hiis V. Saar A. | team is competent, programme is essential | needs increased support, investigate the use of renewable resources | nõus | 3.0 |
| 159 | The quantity & dynamics of fungal diseases & agrotechnical protection of barley | EPMÜ Sõmermaa A.-L. | results are in agreement with other similar works, list of publications is impressive | | nõus | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 160 | Improvement & elaboration of agroecological fundamentals in land tillage | EPMÜ Vipper H. Metsa H. Mander Ü. | the hostilic approach is interesting, res. is well motivated & needed | collaboration with European researchers | Eestile väga vajalik | 1.5 |
| 161 | An improvement in the quality of grain crops in Estonia | EPMÜ Lepajõe J. Kärner E. | research is important | needs support, work should be expanded & coord. on national basis | Eestile vajalik | 1.5 |
| 191 | Research & application of meristem culture & microclone propagation | EVIKA Rosenberg V. | theoretical & dealing with anal.methodol.under dyn.leadership,key function, methods appropr.& stable,program important, internat. reputation | base nat.seed potato scheme on meristem cultures | nõus | 3.0 |
| 198 | Formation of yields & their quality of barley varieties depending on the seeding rate & mineral N fertilizer | EMMTUI Kuusiku Exp. Stat. Hannolainen G. et al. | work has given substant. info, decisions on future after publication | publication of results and cooperation with Agr. Univ. necessary | nõus | 1.0 |
| 199 | Elaboration of structure effective sowing areas & system rotation of crops in intensive cultivation for different soils & producing areas of Estonia | EMMTUI Kuusiku Exp. Stat. Raig H. Hannolainen G. Viil P. | results of long-term experim. valuable, publication of results & conclusions achieved has not been done | results must be published, collab. Agr. Univ., create advisory panel | nõus | 1.0 |
| 200 | Elaboration of scientific ground for rational tillage systems on cultivation of field crops in Estonia | EMMTUI Kuusiku Exp. Station Viil P. | res. very applied, has empirical character, field experim. well done, valuable results for farmers have appeared | results must be explained more exactly, analyses necessary | nõus | 3.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 246 | Improvement in the ways of utilization of land & cultivated grasslands, which meet the requirements of an intersive cattle breeding & clarification of the opprtunities for perfecting the yield quality (3 areas) | ELVI<br>Liiv J. Annuk K. Karelson M. | res.activities & developm.work are of very applied,some of studies are of great, some of those of limited value,vast experience & knowledge | cooper.animal sci.,direct res.more towards forage/pasture relationships | nõus | 2.0 |
| 298 | The investigation of the energy-saving methods for the increasing & improving of the quality of the biological & zootechnical (utilized by cattle) yield of the intensive grasslands | EPMÜ<br>Viiralt R. Loid H. et al. | good standard, field trials well managed and designed, probl. relevant | stimulate close collaboration with animal research | nõus | 3.0 |
| 540 | Plant breeding and varietal improvement of potatoes and vegetables | EMMTUI<br>Jogeva Plant Breeding Station | high quality, sound, good leadership, good international contacts | full support, continue collabor. with EVIKA | nõus | 4.0 |
| 541 | Plant breeding and varietal improvement of fodder crops | EMMTUI<br>Jogeva Plant Breeding Station | key function, programme important, contributions substantial | full support rec., coop. with other org. in Estonia | nõus | 4.0 |
| 542 | Plant breeding and varietal improvement of cereals and pulses and breeders seed production | EMMTUI<br>Jõgeva Plant Breeding Station | key function, good results, well responding needs of Est. agriculture, existing international collab. should be developed | full support, strenghten breeding of wheat, Triticale & winter barley | nõus | 4.0 |
| 543 | The elaboration of agrotechnique of potato growing and storage technology. The influence of | EMMTUI<br>Aamisepp I. Tartlan L. et al. | project important, in good hands, staff very competent, exp. well performed | support,should be strengthened, collab.in Est.& Nordic countries | nõus | 4.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | research methods upon the basic indicators of table potato. | | | | | |
| 544 | Growing of legume crops and oilseed rape for protein supplements and dietary fats sources | EMMTUI Kaarli K. et al. | experienced group has good ability for these applied well-managed experim., important for Estonia | support, coord. with EPMÜ (proj. 157) | turu-uuring vajalik | 2.5 |
| 547 | The baking qualities of wheat grain in Estonia and their dependence on species, growing place and agrotechnology | EMMTUI Tõnissoo A. | area important, start is good | central cereal lab. needed for res. control, project supported | nõus | 2.0 |
| 548 | Control of insect pests, diseases and weeds in agricultural crops | EMMTUI Uusna S. et al. | integr. plant protect. vital, has key function, staff limited, several areas not repres., increase the number of scientists | concentrate the scope of investig., coop.other org. in Est. | vajalik, toetada | 1.0 |
| 549 | Fruit and small fruit breeding. Apple rootstock breeding | EMMTUI Polli Exp. Station Kask K. et al. | program important, high quality, genetic stocks impressive, under the aegis of Nordic Gene bank close network established | high prior.for future support,contacts for coll.would be of mut.value | nõus | 4.0 |
| 550 | Investigation of regulation of plant-microbe association for stable agricultural production of high quality | EMMTUI Sarand R.-J. | work is of great interest, has a potential for establishing more biol. methods in farming | support, concentrate on most important objects, sci. exchange | nõus | 2.0 |
| 551 | The agrotechnique and breeder seed growing of flax | EMMTUI Paalmann K. | after positive outcome of market | investigate market situation & | Eestile vajalik | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | investigation the project is justified | prognosis, incl. export, for fibre & seed | | |
| 552 | Investigation of microbiological and chemical agents for preservation of grassfodder | EMMTUI Sarand R.-J. | development work of value for Estonia, testing & analyses are relevant, res. fair quality, fairly close internat. contacts | establish contacts with other labs, consider risks of using some prod. | nõus | 1.0 |
| 553 | The intensification of grassland management and raisening the nutritive value of grass feeds | EMMTUI Older H. | applied work important for Est., good team, res. fair quality, established intern. cont. | new analyt. techniques have to be tested, contacts needed | nõus | 2.0 |
| 554 | The influence of post harvesting processing - preserving upon the quality of fodder grain | EMMTUI Linnutaja A. | relevant for development & extension project, fair quality | | nõus | 1.0 |
| 97 | Breeding, improvement, agro-technology & fodder quality of the new fodder plant goats rue (galega). Galega orientalis Lam. | EMMTUI Raig H. | project is unique, res. team good | continue, spec. attent. to fodder value & balance in mixt. with grasses | nõus | 3.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 5.3. Metsandus | | | | | | |
| 171 | Improvement of prediction & planning rules for automated control system of forest management | EPMÜ Nilson A. | little time for res.- high teaching load, lack of equipment | limit educational duties | ? | 0.0 |
| 318 | Measures for management of forests on drained lands & a system of forest fertilization | EMI Valk U. Pikk J. | res. is of great importance | program for complementing old drainage system needed | nõus | 2.0 |
| 319 | Complex measures for recultivation of land damaged by industry & for raising the resistance of stands to pollution | EMI Kaar E. | positive impression, great importance for forestry measures on soils which are lacking all humus, satisfactory quality | select most interesting results for future treatment, higher precision | nõus | 1.5 |
| 320 | The seed-growing of the main tree species of Estonia | EMI Etverk I. Paal H. Tamm Ü. et al. | great importance,researche rs well informed about results in other countries, positive impression | use method with somatic embrogenesis too | nõus | 2.0 |
| 321 | An integrated system of measures for management of forests with multi-purpose utilization | EMI Lõhmus E. | positive impression, similarities with projects in the Nordic countries, researchers well informed about res. | will be of growing importance after the privatization of st.forests | tulemused olulised | 2.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | in other countries | | | |
| 322 | Forest monitoring, integrated system of forest insect pest control, epiphytotiology & control of heterobasidion root rot, needle cast & shoot blight diseases, ecology of needle fungi of conifers in various conditions of air pollution (several projects) | EMI Mihkelson S. Hanso M. | positive impression, quality seems satisfactory, a number of projects under this umbrella project have great importance, good contacts | will be of growing importance in forest research | Eestile väga vajalik | 1.0 |
| 323 | The management regime of protected areas, principles of protection of rare & endangered plants & animals & facilities for the utilization of wild berries (several projects) | EMI Örd A. et al. | high quality, good contacts & awareness of research results abroad | some projects should be run by other organizations | nõus | 4.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 5.4. Põllumajanduse mehhaniseerimine | | | | | | |
| 162 | Research on use of enhanced technical level tractors & other agricultural machines | EPMÜ Martis V. Aadusoo L. Olak H. | very little sci. work, mainly teaching, equipment outdated | | nõus | 0.0 |
| 163 | Methods of security determination & effeciency guarantee in dairy farms as biotechnical systems | EPMÜ Reppo B. | problem important for practice, for intern.comparison contacts needed, good contacts with practical farming | some sci. methods should be upgraded, better instrumentation needed | Eestile oluline | 1.0 |
| 165 | Elaboration of methods to estimate labour efficiency in dairy farms & its technolines | EPMÜ Veinla V. | good contacts with practical farming, sci. methods seem simple but may be very precise, group is dedicated | sci. methods must be reevaluated & developed | publ-tud,juurutatud | 2.0 |
| 167 | The creation of basis for most efficient of energy, electrical equipment & labor in stationary processes of agriculture in Estonia | EPMÜ Peets T. Liiske M. Kokin E. | dept. is isolated,res. projects & sci. methods & equipment outdated | upgrade res. methods, equipment & teaching, change res. objectives | nõus | 0.0 |
| 205 | Working out & determination of land cultivation machinery & set of tools suitable for Estonian agriculture | EMMTUI Jakobson A. Kallas A. | testing results have limited value,redesign & adjustm.of sov.mach.may be | reorient. to suit private farmers demands, new staff & instrumentation | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | important & necessary, but mach. shop sold to private car repair comp | | | |
| 249 | Improving & evaluating techno-lines in dairy farms with different technology with the aim of rising labour productivity & save energy | ELVI Vutt O. | work very applied, but important for Est. in future | field has to be changed, internat. contacts & new scientists needed | nõus | 1.0 |
| 342 | Complex mechanization of potato cultivation | EPMÜ Karolin M. | applied work of significance for Est., group is dedicated to their task | intern. contacts and young researchers needed | nõus | 1.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 5.5. Toiduaineteadus ja biotehnoloogia | | | | | | |
| 186 | Selection of biologically active starter cultures for indirect biological cultureing of butter | EPMÜ Eller H. | development research & quality control, close contact with dairy industry | equipment needs renewal | nõus | 1.0 |
| 187 | Studing physico-chemical & microbiological bases the technology of Swiss-type cheeses | EPMÜ Elias P. | development work is of great value for Estonia | international contacts needed for gaining experience | nõus | 2.0 |
| 188 | Improvement of the milk and meat technology of production and working out of new products | EPMÜ Kiis A. | the new system is patented, technological & scientific skill are of high level | | nõus | 4.0 |
| 189 | The investigation of possibilities to improve the quality of pork produced by intensive technology in the Estonian Republic | EPMÜ Rei M. Kirikall V. | work is not research, only quality control, equipment limited | | nõus | 0.0 |
| 190 | About clearing up of using enzyme preparation systemin agriculture | EPMÜ Nummert A. | no statement on quality | | ? | 0.0 |
| 26 | Non-toxic insecticide & know-how on the base of this preparation to prolong the period of biological control | EPBTK Palm T. Pilt L. | difficult draw conclusions yet, project needs follow up, no data or | | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | of plant vermins | | references that this is a research in its true sense | | | |
| 28 | The study about the perspective of producing feedprotein by bioconverting the milk whey | EPMÜ Noorem A. | similar studies performed in many places in 1970-80's, but interrupted when they show to be economically profitable | | nõus | 0.0 |
| 29 | Eloboration of probioticums for calves, piglets & chickens on the base of lactobacilli | EPBTK Elias P. Kasemets K. | very active, positive results reported, methods good, modern, control of production good, production seems safe | | nõus | 3.0 |
| 30 | Normalisation of matabolism & digestion of domestic animals | EPBTK Kumar J. | methods quite up to date, preparations well known, work is hardly research, merely business and no recommendations | | nõus | 0.0 |
| 31 | Selection of eimeria strains for coccidiosis vaccine | EPBTK Parre J. Simovart H.-E. Schattschneider T. | polyvaccine elaborated, work is going on, team seems very qualified | | nõus | 3.0 |
| 32 | The investigation of coliinfections prophylactic methods | EPBTK Kampus N. Lindjärv R. | methods quite uptodate, vaccines produced, effect controlled in proper way | | nõus | 1.0 |
| 34 | Elaboration of | EPBTK | project clearly | continue, contact | nõus | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | ELISA-diagnostics & vaccine against infectious bovine rhinotracheitis virus | Kasesalu J. | important Est., equipment good, staff young & enthusiastic,internat.contacts,commerc.tendency may have neg.influence on sci. | ELVI | | |
| 47 | Improvement of food quality & nutritive value. Rational use of raw materials & by-products of food industry | TTÜ Kann A. Tauts O. | productivity seems to be good, large variety of projects within several areas of food science gives rather split picture, no intern. publ. | give priority to 1-2 basic areas of intern. interest, advanced equipm. | nõus | 2.0 |
| 48 | Enzyme engineering. Industrial biocatalytic processes | TTÜ Köstner A. | productivity & publ.rate high, development of patents, resulted in industr.proc.,probl. important, relevant,res.very clear, org.intern.symp. | develop intern. contacts, more publ. in intern. journals | nõus kemiaeksperdid - hinne 3, finantseerida granti kaudu, ei taotle baasraha | 4.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 5.6. Loomakasvatus | | | | | | |
| 172 | Saving of defficient &expensive protein feeds in feeding of domestic animals & fowl | EPMÜ Oll U. Kart O. | basic & applied res.is important,internat.contacts, dept. follow very well intern. literature & work actively with own research | modern protein analysis lab & lost animal experimental unit needed | nõus | 4.0 |
| 173 | Breeding of Estonian quail & white farm mallard (Kaarepere Exp. Station) | EPMÜ Tikk H. | developmental research, seems important & successful, has been at the focus of 2 international meetings | | nõus | 2.0 |
| 174 | Research on the biological & cybernetical basis to automatize dairy husbandry technologies for high productive cows | EPMÜ Rüütel A. Praks J. | many interesting results comparable with other leading labs, generate new knowledge of great international interest | greatly important in future, intern. contacts & better instruments | nõus | 4.0 |
| 175 | The study of on effective way of producing human food protein in animal husbandry in Estonia | EPMÜ Saveli O. Lepajõe L. Helm T. Nommisto I. | lots of efforts have been put into the area, applied parts of animal breeding are covered | system analysis approach necessary | nõus | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 247 | Research into the handling, treatment, composting & effective utilization of manure on cattle & pig farms in Estonia | ELVI Masso V. | not evaluated | | ? | 0.0 |
| 248 | Investigation into the number of cows in dairy groups | ELVI Pettai E. | hardly any sci. work | | nõus | 0.0 |
| 250 | The improvement of milk handling & cleaning milkdairy equipment to produce the high-quality milk on the dairy farms | ELVI Olkonen A. | it is not res. but development work, area is important | | Eestile vajalik | 0.0 |
| 254 | Evaluation of rams according to their performance | ELVI Puka Experimental Farm, Müts E. | activity is not research, important & has particular significance to farmers | | nõus | 1.0 |
| 255 | Feeding, feeding technology & keeping systems of pigs | ELVI Kehtna Swine Res. Stat. Nigul L. | important applied res., some unusual ideas, problem relevant, only one level of substitution has been used | use more advanced stat.meth.,combine basic & appl.experiments,coop.EPMÜ | nõus | 1.0 |
| 256 | Improvement of the swine breeding system in Estonia | ELVI Kehtna Swine Res. Station Eilart K. | work has been valuable for Est. pig production | coop. with EPMÜ, increase attention to improvement of meat quality | nõus | 2.0 |
| 257 | Feeding of record-cows for the purpose of achieving high life-time productivity | ELVI Ilus A. | research & developm. work, lab well equipped, staff experienced, intern.contacts, important publications | promote cooperation with Agric. Univ. | nõus | 3.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 258 | The research into local & non-traditional feeds | ELVI Ilus A. | this development work is necessary for Estonia | program should be given highest priority | nõus | 3.0 |
| 259 | Meat production resources of Estonian cattle breeds | ELVI Suurmaa A. | topics relevant,most results pract. value, methodol.has sci.interest, contacts with Nordic countries | | nõus | 2.0 |
| 261 | Studies of blood group & serum protein polymorphism in cattle | ELVI Õkva T. | research activities limited, equipment old, no work in DNA genetics | use adequate statistical methods | nõus | 0.0 |
| 262 | Studies on influence of Holstein genotype in Estonian black & white herd | ELVI Kallas L. | development work, very useful for Estonia | | nõus | 1.0 |
| 263 | Improvement of the milk production traits of the Estonian cattle breeds | ELVI Idarand H. | breeding program is very similar to those used in most western countries results have been encouraging, will be of great value for future | use for the future breeding policy | nõus | 1.0 |
| 264 | Development of fish farming in Estonia | ELVI Paaver T. Puhk M. et al. | res. at DFF qualitatively good, but quant. narrow, competency fear to very good, res.facilities very poor & unsufficient | focus on juvenile prod.of wide scale species,joint projects with Swed. | nõus | 2.5 |
| 265 | Heritability & selection of animal quantitative characters (4 projects: a) selection studies in dairy cattle b) | EBI Teinberg R. | good theor.res.applied in the developm.programs,qu | develop intern. contacts, diminish area of topics | nõus | 3.0 |

| | | | | | |
|---|---|---|---|---|---|
| | cytogenetic studies c) genetics of stress & hypertension d) genotype-environment interaction) | | antit.genetics in cattle - good intern standard, other 3 - weaker base handled by 1 person | | |
| 325 | The breeding & selection of egg & meat type hens in Kurtna poultry breeding experimental station | ELVI Turp A. | selection work has been successful in this commercial breeding centre for the development of breeding material in poultry industry | nõus | 1.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 5.7. Veterinaaria | | | | | | |
| 176 | Metabolism of carbohydrates & protein in high yielding dairy cows | EPMÜ Kadarik K. | knowledge is not up to date, research in this area is important | continuation recomm., cooper.ELVI, equipment,training, literat. needed | nõus | 1.0 |
| 177 | The correlation between the antimicrobial activity of the blood serum & the livability in cows | EPMÜ Pavel U. | results not convincing, immun.& blood parameters used are crude | if modern immunol.techniques cannot be used project must be terminated | nõus | 0.0 |
| 178 | The quality of milk produced in large-scale farms & prophylaxis of mastitis | EPMÜ Peterson K. | problem is acute but only the growth of microorg. in milk is detected | the reasons of their growth should be cleared, res.-s trained abroad | nõus | 1.0 |
| 179 | Electroaerosols, laser-technology & electrochemical processes in veterinary | EPMÜ Pärnaste E. | no competence in Sweden to evaluate this project, the use of aerosols could not replace a mechanical cleaning | the control of effect of electroaerosols was noted | nõus | 1.0 |
| 180 | Investigation of atypical mycobacterial infections (mycobacterioses) in pigs under natural & experimental conditions (etiology, epizootology, pathomorphology, | EPMÜ Kozlov N. | work seems of great interest for Estonia, has a good sci. standard | contacts with groups in West working within area of basic immunology | nõus | 3.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | diagnostics) | | | | | |
| 181 | Helminthoses in games, their control & connection with helminthoses of domestic animals in Estonia | EPMÜ Järvis T. | knowledge of situation seems very good international contacts | develop international contacts | nõus | 3.0 |
| 182 | Bovine enzootic leucosis problems research, improvement of diagnostic measures and elaboration of eradication schemes for Estonian cattle | EPMÜ Simovart J. et al. | internacionally accepted method used, project of importance for Est., but potent. benefits must be evaluated | set up ELISA-test & nation.program for eradication BLV, coop.ABCenter | nõus | 2.0 |
| 183 | The ageing & functional changes of gut & female tubular genital organs | EPMÜ Kübar H. | good quality, part of results should have been accepted for internat. publ., lab rather well equipped, staff enthusiastic | support strongly recomm. as work is of intern. interest | nõus | 3.0 |
| 184 | Prophylaxis & treatment of gynaecological diseases (4 projects) | EPMÜ Aidnik M. | res. very relevant to national needs, satisfact. qual.,no intern.cont. | incresed support very important, contacts with ELVI & intern. | nõus | 1.0 |
| 185 | The influence of some tissue preparations on the growth, development, resistance & wound healing of sucking pigs | EPMÜ Reidla K. | results are problematic, res. is not up to date | results should be accepted internationally otherwise - terminated | nõus | 0.0 |
| 251 | Improvement in diagnostics & prophylaxis of bovine metabolic disorders (3 projects) | ELVI Peda Ü. | proj.a,b studies well performed, methods up to date, lack intern. lit. | continue, coord. Agr. Biotechn. Centre, study modern literature | nõus | 3.0 |
| 252 | To work out, estimate & applicate into practice new effective diagnostic & | ELVI Kaarma A. Mägi E. | very good, experiences from different types of | closer sci. cooper. with Nordic countries | nõus | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | prophylactic measures to control the infectious & parasitic diseases of the farm animals | | animals very well described, number of publ. good | | | |
| 253 | Improvement of diagnostic & prophylactic methods for treating cow mastitis | ELVI Raid H. | methods are enough for clinical investigations, program is impressive, info interesting, no basic research | clinical findings should be more related to bacteriol. findings in udder cooper. needed | nôus | 0.0 |
| 260 | Elaboration & application of bovine embryo transfer technology suitable in conditions of Estonia (3 projects) | ELVI Müürsepp I. | mostly applied work of good quality, great importance for Est., equipment modern | support strongly rec., coop. EAU, TU, young staff practise West.labs | nôus | 3.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 6.1. Majandus | | | | | | |
| 146 | Proposals for development of research & education of internationaleconomics & business at Tartu University | TY<br>Reiljan J. | | | | 0.0 |
| 148 | Human perception & visual information processing | TY<br>Allik J. Luuk A. Mikk J. | high quality | jätkata ja laiendada uurimist, suurendada finantseerimist | uurimist jätkata, laiendada, finantseerimist suurendada | 0.0 |
| 150 | Investment sphere conception & methods for passage to market | ETUI<br>Golub L. | | | | 0.0 |

********
etor not found error reading file
FORM\TRYKK.TXT

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 6.2. Õigusteadus | | | | | | |
| 11 | The creation of the normative basis of the state of law | FSÕI<br>Koitel H. | | | | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 6.3. Sotsioloogia | | | | | | |
| 10 | Changing way of life in Estonia | FSOI<br>Rannik E. Järve P. | | | | 0.0 |
| 147 | Education as a factor of self-determination of Estonian youth | TY<br>Titma M.<br>Kenkmann P. | good international standard, comparable to many Western institutions | good care of valuable pool of talent & knowledge should be taken | nõus | 0.0 |
| 279 | "Tartu University library & reader"<br>"The role of the library in scientific communication" | TY RK<br>Peep L. Ermel M. | | | | 0.0 |
| 307 | The readers of newspaper, journals, magazines & books in Estonia | TY<br>Nihalin P. | | | | 0.0 |
| 9 | Formation & dynamics of social bodies, forming of corresponding social activness & values in contemporary Estonian society | FSOI<br>Titma M. | good international standard | continue support | nõus | 0.0 |
| 98 | The influence of economic, sociological & psychological factors on the functioning of the Estonian family | TY<br>Tiit E.-M. | | | | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 6.4. Filosoofia | | | | | | |
| 1 | Value & meaning in aesthetics | TY Stolovits L. Matjus Ü. | | | | 0.0 |
| 12 | Current political, international & baltic studies in Estonia | FSOI Vares P. | taking into account unfavorable circumstances paroject is of good quality | | nõus | 0.0 |
| 2 | Re-emergence of democracy in Estonia | TY Loone E. | taking into account unfavorable circumstanc4es project is of good quality | | nõus | 0.0 |
| 222 | Methodological aspects of evolutionary theory & history of science | ZBI Sutt T. | | | | 0.0 |
| 3 | Comparative epistemology of disciplinary research matrices (social science & history) | TY Loone E. | good international standard | support recommended | nõus | 0.0 |
| 7 | The philosophical & methodological problems of interdisciplinary studies in contemporary science (particularly from 1986 to 1990) | FSOI Rebane J. | | | | 0.0 |

EESTI TEADUSE EKSPERTIISI TULEMUSED
1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 6.5. Pedagoogika | | | | | | |
| 13 | Methods of compiling of schoolbooks & their appropriateness analysis | TY Mikk J. | | it would be very fruitful if this work could continue | nõus | 0.0 |
| 136 | Innovational mechanisms in the teachers´ education | TY Salundi M. | | | | 0.0 |
| 137 | Modelling the possibilities (strategies) for the personality-centred language teaching. Conditions for the acquisition of the communicative language competence at secondary & higher school level | TY Metsa A. | valuable research | ought to be supported | nõus, finantseerida tööjätkamist | 0.0 |
| 138 | A new system of chemical education in Estonia goals,guidelines, syllabi, methods of teaching & organization | TY Tõldsepp A. | valuable work | ought to be supported | nõus, finantseerida | 0.0 |
| 149 | Elaboration of the scientific bases of vocational guidance & a program of practical counseling for the education system of the Republic of Estonia | TY Sukamägi A. | | | | 0.0 |
| 303 | Pedagogical kinesiology | TPEDI | | | | 0.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | Gross H. | | | | |
| 305 | Possibilities of integrated & differentiated teaching in Estonian vocational schools | TPEDI<br>Kõverjalg A. | leader very highly educated and experienced researcher | resources must be allocated | nõus | 0.0 |

# EESTI TEADUSE EKSPERTIISI TULEMUSED
## 1991 - 1992

| Proj. reg.nr. | Projekti nimetus | Teadusasutus, projekti juht | Rootsi ekspertide hinnang | Rootsi ekspertide soovitused | ETF-i eksp.komisjoni hinnang ja soovitus | Hinne tööle |
|---|---|---|---|---|---|---|
| ** Teadussuund : 6.6. Psühholoogia | | | | | | |
| 304 | Communication skill training | TPEDI<br>Mikkin H. | | | | 0.0 |