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### 1) LFTY järjestämässä teemasessioita EMBEC2011 konferenssiin

LFTY on saanut kutsun ehdottaa erikoissessioiden järjestämisestä "5th European Conference of the International Federation for Medical and Biological Engineering" (EMBEC2011) konferenssin yhteydessä, 14-18.9.2011 Budapestissä (<http://www.embec2011.com>). LFTY:n jäseniltä toivotaan ehdotuksia näiden sessioiden aiheista, puheenjohtajista ja mahdollisista varapuheenjohtajista. Ehdotuksia voi lähettää yhdistyksen sihteerille.

### 2) Professori, terveydenhuollon tietotekniikka

Tampereen teknillisenä yliopistona (TTY) toimiva TTY-säätiö on noin 2000 työntekijän ja 12 000 opiskelijan aktiivinen tiedeyhteisö ja haluttu tutkimusmaailman ja elinkeinoelämän kumppani. Monilla TTY:n tutkimus- ja koulutusaloilla on keskeinen rooli globaalien haasteiden ratkaisemisessa. Kansainvälisyys on osa kaikkea TTY:n toimintaa. Tule kehittämään huippuosaajien joukkoon!

Tähän tehtävään vaaditaan Opetusportfolio, jonka voit jättää hakemuslomakkeella.

#### Professori, terveydenhuollon tietotekniikka

Tehtävän alana on terveydenhuollon tietotekniikka. Tehtävän alan täsmennys on "Telelääketiede".

**Tehtäväkuvaus:** Professorin tehtävästä on olemassa tehtäväntäyttökuvaus ja TTY:n mallin mukaisen opetusportfolion kuvaus. Nämä ovat saatavissa osoitteesta [www.tut.fi](http://www.tut.fi) > Ajankohtaista > Avoimet työpaikat.

**Palkkaus:** Palkkaus perustuu tehtävien vaatavuuteen ja henkilökohtaiseen työstä suoriutumiseen yliopistojen palkkausjärjestelmän mukaan. Professorin tehtävät asettuvat opetus- ja tutkimushenkilökunnan vaatavuustasolle 8-10. Lisäksi maksetaan henkilökohtaiseen suoriutumiseen perustuvaa palkanosaa.

**Muuta huomioitavaa:** Tehtävä täytetään aikaisintaan 1.1.2011 lukien toistaiseksi.

Lisätietoja antaa professori Hannu Eskola, p. 040 829 7466, sähköposti [etunimi.sukunimi@tut.fi](mailto:etunimi.sukunimi@tut.fi).

**Lisätietoja antaa:** Lisätietoja tehtävästä tai tehtäväntäyttökuvauksesta voi tiedustella myös tiedekuntapäällikkö Teemu Toivoselta p. 040 849 0949, sähköposti [etunimi.sukunimi@tut.fi](mailto:etunimi.sukunimi@tut.fi).

**Hakuohjeet:** Hakemus tulee jättää sähköisesti viimeistään 1.11.2010.

**Lisätietoja:** <http://www.tut.fi/public/index.cfm?MainSel=1&Sel=80&Show=80&Siteid=0>



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### 3) *Early stage researcher positions in scientific computing, University of Eastern Finland*

University of Eastern Finland  
Department of Physics and Mathematics (Kuopio campus)

The University of Joensuu and the University of Kuopio merged to constitute the University of Eastern Finland, which began its operations on 1 January 2010. The University of Eastern Finland seeks to be an internationally recognised research and teaching university, which is among the top three most significant universities in Finland and among the leading 200 universities in the world.

The Inverse Problems Group (IPG) at the University of Eastern Finland is affiliated with the Center of Excellence in Inverse Problems Research (Academy of Finland). The IPG is led by Prof. Jari P. Kaipio, and it currently consists of 10 senior and postdoc researchers and 8 PhD students. The group will hire new doctoral students in 2011. All PhD projects are related to scientific computing, either to the stable forward, or the unstable inverse problems. With all projects, part of the work is to be carried out while visiting one or several of the international partners. The salary will be placed on levels 1-4 of the job demands level chart for teaching and research personnel in the Salary System for Finnish Universities. The duration of the position can be up to four years, beginning on 1 January 2011. However, with most projects, the starting times are negotiable, and the style and contribution can be adjusted somewhat to match the students' strengths.

We invite prospective candidates (persons with a relevant MSc degree or students graduating in the near future) to apply for one or several of the following projects

- 1) Stochastic boundary models for inverse problems induced by PDEs
- 2) Development of advanced modelling for diffuse optical tomography
- 3) Electrical capacitance tomography imaging of concrete
- 4) Optimal control in geophysical tomographic problems
- 5) Electrical impedance tomography for non-invasive measurement of occupational voice loading

The application with the following documents should be sent or delivered to the Registry Office of the University of Eastern Finland, Kuopio Campus, P.O.B. 1627, 70211 Kuopio, Finland (street address: Yliopistonranta 1 E, Snellmania) or Joensuu Campus, P.O.B. 111, 80101 Joensuu, Finland (street address: Yliopistokatu 2, Aurora). The deadline for applications is October 29, 2010 (at 3.00 pm).

- 1) Cover letter indicating which project(s) are addressed,
- 2) Short CV,
- 3) Scanned copies of relevant diplomas and transcripts of academic records. The diplomas and transcripts should be in English or Finnish and the grading system should be described
- 4) Names and contact information of two referees

For more information, see

<http://physics.uku.fi/research/IP/Announcement2010.pdf>

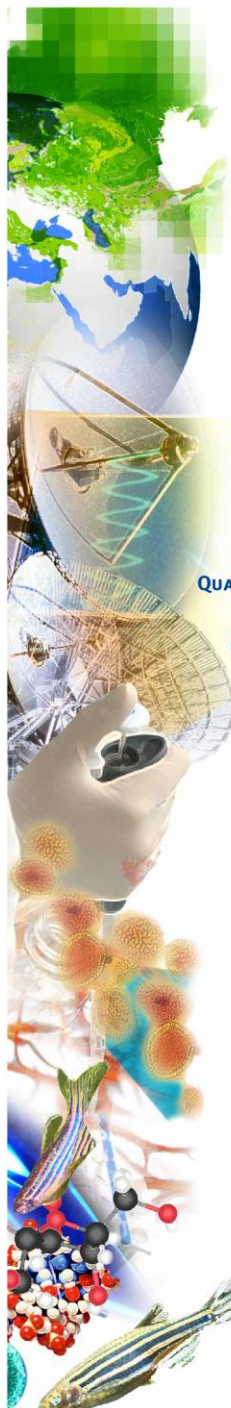
All enquiries related to the PhD projects: [Ville.Kolehmainen@uef.fi](mailto:Ville.Kolehmainen@uef.fi)



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#### 4) European Commission Joint Research Centre (JRC), researcher positions

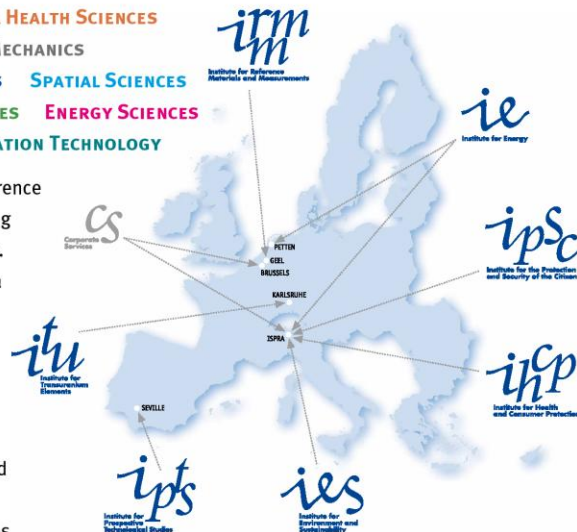


## Europe needs researchers

The European Commission's Joint Research Centre (JRC) is a reference centre of science and technology for the European Union. Operating in Belgium, Germany, Italy, Spain and the Netherlands, with a head-count of over 2,700, the JRC is currently seeking researchers with the right blend of competence, experience and language skills to work at the cutting edge of scientific and technological developments supporting EU policies. If you have a sound track record of research in:

- CHEMISTRY, BIOLOGY & HEALTH SCIENCES
- PHYSICS STRUCTURAL MECHANICS
- QUANTITATIVE POLICY ANALYSIS SPATIAL SCIENCES
- ENVIRONMENTAL SCIENCES ENERGY SCIENCES
- COMMUNICATION / INFORMATION TECHNOLOGY

you can make all the difference within the JRC's stimulating multicultural environment. In return, you can expect a lifetime of different opportunities, a competitive remuneration package, flexible working arrangements and the chance to become involved in some of the most exciting research initiatives in Europe today.



*The JRC promotes equal opportunities and non-discriminatory practices in the workplace*

To learn more, visit [www.jrc.ec.europa.eu/competitions](http://www.jrc.ec.europa.eu/competitions) and as soon as you are ready to apply, fill in your on-line application at [www.eu-careers.eu](http://www.eu-careers.eu)

Registration closes on 4<sup>th</sup> November 2010





## 5) *PhD student position on electrocardiographic imaging*



### **PhD Student for ‘Non-invasive Electrocardiographic Imaging to Assess Cardiac Electrophysiological Integrity’ (1.0 fte)**

Radboud University Medical Center Nijmegen

Salary: € 2673 gross/month

Vacancy number: 010205

Closing date: November 1, 2010

#### **Job description**

Obtaining precise information about the condition of the heart by looking at ECG recordings is not easy. Non-invasive myocardial imaging is a computational method that constructs images of the electric activity of the heart on the basis of ECG recordings and a volume conductor model of the patient.

At the current stage, the method has shown promising results, but has barely entered clinical practice, partly because of its technical complexity. This project aims at solving this problem by automating the creation of the 3D volume conductor models from MR recordings and by optimizing and streamlining the computational methods of the non-invasive imaging technique. In a parallel project, by another PhD student, patient and animal data will be obtained in order to validate the method.

#### **Requirements**

The candidate should:

- have a Master's degree in Technical Medicine, Computer Science, Physics, or another relevant study,
- have programming experience in Matlab, C, C++ or equivalent,
- be able to collaborate in a multi-disciplinary team.

Preferably the candidate should also

- have experience in working with 3D programs,
- have knowledge of image analysis and FEM/BEM methods

Anatomical knowledge or experience with medical imaging modalities(CT/MRI/echo) would be an advantage.

#### **Organization**

This PhD project is part of a combined project of the Interuniversity Cardiology Institute of the Netherlands (ICIN) and the Radboud University Medical Center in Nijmegen, funded by the



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Technology Foundation STW. The project employs two PhD students and two postdocs, all for four years, and includes staff involvement from both sites.

The Nijmegen part of the project is embedded in the bio-electricity group of the multi-faculty Donders Center for Neuroscience. The centre is a lively, friendly, collaborative environment, and has a staff of excellent researchers from all over the world.

Website: <http://www.ru.nl/neuroscience>.

### Conditions of employment

Employment: 1,0 fte

Maximum salary per month, based on a fulltime employment: € 2673 gross/month

P-scale: the starting salary is €2,086 per month and will increase to €2,673 per month in the fourth year.

In addition to the gross basic salary, you will receive two yearly 8% bonuses (holiday and end-of-year).

This position is initially for three years with a possible extension for one more year.

### Additional information

Dr. Thom Oostendorp

Telephone: +31 24 3614240

E-mail: [T.Oostendorp@donders.ru.nl](mailto:T.Oostendorp@donders.ru.nl)

### Application

You can apply for the job before November 1, preferably via this link:

<http://www.umcn.nl/OverUMCstRadboud/werkenbij/Pages/Vacature.aspx?VacatureNummer=010205>, or alternatively by sending an e-mail to [M.Korsten@sb.umcn.nl](mailto:M.Korsten@sb.umcn.nl) (mention the vacancy number 010205).