

PhD. v Chalmers

Dear friends,

I apologize for spamming but am writing to you for asking for help in disseminating an announcement about 2 PhD position we have in our group (Nuclear Chemistry and Industrial Materials Recycling) at Chalmers:

ESR 8:Research Topic: Development and optimisation of separation processes for heavy rare earths (needed skills: MSc. In Chemistry)

ESR 9:Research Topic: Development and optimisation of the organic phase in separation of heavy rare earths (needed skills: MSc. In Chemistry especially Organic Synthetic Chemistry)

It is a "twin project", where the PhD students will complement each other and will last for about 4 years.

As a PhD student in Sweden, they will receive a very attractive salary which will allow them a decent life along with all the benefits of an employee at the university (medical insurance, about 28 vacation days, work insurance).

They will be involved in a very dynamic project, with a lot of mobility within Europe (see description below).

The persons must not be Swedish citizens and should not have spent more than 3 months in Sweden before with work.

An official announcement will shortly be published on Chalmers website, I will provide you with that soon.

This position should start very soon, if possible before the end of this year!

Should any person be interested, please ask them to contact me asap.

Thank you very much!

Teodora

Chalmers Group

The Industrial Materials Recycling group carries out research in material recycling and development of new recycling methods. Current projects concern recovery of metals from spent batteries, CIGS solar cells, low energy lamps, flat screens, paint residues and waste combustion ash. The group consists of 5 senior scientists, 4 postdocs and 10 PhD students and works together with the Nuclear Chemistry group which means a good availability of advanced analytical methods.

An important focus area is the utilisation and development of hydro chemical recovery and separation methods for valuable metals, such as the rare earth metals. These metals are necessary for the electronic industry. Since the available ore reserves in Europe are scarce, recycling from waste electronics is highly needed

The description of the projects

The positions described below will be funded by the Marie Curie Initial Training Network "EREAN-EuropeanRare Earth Magnet RecyclingNetwork" of the 7th Framework Programme of the European Commission. EREAN is a consortium of high profile universities, research institutions and companies located in Belgium, Finland, Sweden, The Netherlands, UK, Germany and France.

The Marie Curie programme offers highly competitive and attractive salary and working conditions. Benefits include mobility allowance, career development allowance and a travel allowance. In addition to their individual scientific projects, all fellows will

benefit from further continuing education, which includes internships and secondments, a variety of training modules as well as transferable skills courses and active participation in workshops and conferences. The aim of EREAN is to train young researchers in the science and technology of rare earths, with emphasis on the recycling of these elements from permanent magnets.

ESR 8:Research Topic: Development and optimisation of separation processes for heavy rare earths

Objectives: Development of extractants for solvent extraction separation of heavy rare earths from magnet leachates & Development and assessment of new environmentally friendly extractants for REE separation prepared according to the CHNO principle.

Contact: Prof. Christian Ekberg (che@chalmers.se), Prof. Britt-Marie Steenari (bms@chalmers.se)

Duration: 36 months

Planned secondments: University of Helsinki (3 months) , Metal Extraction AB (MEAB)Aachen (1 month)

ESR 9:Research Topic: Development and optimisation of the organic phase in separation of heavy rare earths

Objectives: Optimisation of the organic phase for REE separation processes, including the optimisation of the extraction kinetics by thorough characterisation of the interface between the aqueous and the organic phase

Contact: Prof. Christian Ekberg (che@chalmers.se); Prof. Britt-Marie Steenari (bms@chalmers.se)

Duration: 36 months

Planned secondments: UHelsinki (3 months), MEAB Aachen (1 month)