UQ RARE EARTH MINERALS CONSORTIUM

A consortium to lead new research agendas forging important partnerships between academia, government and industry

THE CONSORTIUM

The University of Queensland is launching a new research consortium initiative which seeks to bring together leading international academics, industry practitioners, and policy makers to discuss the full product cycle of rare earth minerals.

This consortium is a project of the Sustainable Minerals Institute’s NextMine™ Initiative, which is a strategic initiative to identify and address factors that have the potential to limit the growth of the mining industry and its capacity to contribute to sustainable development.

There is unprecedented demand for rare earth minerals in clean technologies and beyond, as such there is also an unprecedented opportunity to diversify how these minerals are harnessed.

Our goal is to undertake leading research to investigate the complex matrix of economic, social, political and environmental issues relating to the sustainable extraction and application of rare earth minerals.

Research undertaken as part of the Consortium will have direct application for companies working with rare earth minerals, addressing issues from the mine to the market.

AFFILIATES

UQ Rare Earth Consortium is pleased to be working with researchers from the following key centres in developing this program:

- Critical Materials Institute, an Energy Innovation Hub of the U.S. Department of Energy
- National Institute of Advanced Industrial Science and technology, Japan
- Commonwealth Scientific and Industrial Research Organization (CSIRO)
- UK Natural Environment Research Council (NERC)
- Centro de Tecnologia Mineral, Brazil
- Chinese Academy of Sciences
- Malaysian Academy of Sciences
- Institute for Sustainable Futures, University of Technology Sydney
- Materials Systems Laboratory, Massachusetts Institute of Technology
- Graduate School of Energy Science, Kyoto University, Japan.

CONTACT
rareearths@uq.edu.au
WEBSITE
www.csrm.uq.edu.au/rareearths
TWITTER
@resourcerules
THE OPPORTUNITY

Rare earth minerals are critical to the development of new material technologies required to sustain the needs of today’s society. We propose an opportunity to undertake critical research to investigate a range of social, economic, political and environmental issues facing companies extracting rare earth minerals and those utilising the end product.

We are establishing a research fund with contributions from international organisations, industry and other institutions interested in research in this area. The fund will be administered by the consortium steering committee who will decide on what areas of research are most needed.

Such research will include:

- Development of economic and ecological sustainability metrics to provide companies with advice on the optimal mix of mined and reused material flows to meet the demand for using rare earths
- Policy recommendations for using a hybrid approach to materials sourcing to mitigate international conflicts and improve resilience in the supply chain model

THE SYMPOSIUM

When: Friday 31st May 2013 (8am – 5pm)
Where: University of Queensland St Lucia, Brisbane, Australia
Register: [www.csrm.uq.edu.au/RareEarths](http://www.csrm.uq.edu.au/RareEarths)

The launch of this consortium will take the form of a one day symposium to develop a series of new research ideas. The event will have presentations by leading researchers followed by a workshop on charting research trajectories in this sector with full audience participation.

This symposium will consider a panoramic perspective of the sector, moving beyond a solely industrial performance focus to address four critical research themes:

- International governance and security concerns around rare earths supply
- Industrial ecological approaches to minimizing environmental footprint of rare earths
- Perceived and real nuclear risks and social conflicts
- Economic determinants and future contributions of the sector to a green economy

MEMBER BENEFITS

Members of the UQ Rare Earth Minerals Consortium benefits include:

- Invitation to the UQ Rare Earth Minerals Symposium
- Connections with key researchers working on mineral futures
- Access to scholars and research that is at the forefront of knowledge in the extractive industries
- An opportunity to influence and drive policy in this key area
- Access to relevant research undertaken by CSRM
- Access to world class training and education opportunities

KEYNOTE SPEAKER

Professor Roderick Eggert has recently been appointed as the Deputy Director of the Critical Materials Institute, an Energy Innovation Hub of the U.S. Department of Energy. He is also the Director of the Division of Economics and Business at the Colorado School of Mines. Professor Eggert will make a keynote presentation on the scarcity and security of rare earths from a global perspective.

contact: rareearths@uq.edu.au
twitter: @resourcerules
ABOUT CSRM

CSRM is a leading global research centre, committed to improving social performance in the resources sector globally. Our focus is on the social, economic and political challenges that occur when change is brought about by resource extraction and development.

We are part of the Sustainable Minerals Institute at the University of Queensland, which is the world’s leading research institute dedicated to finding knowledge-based solutions to the sustainability challenges of the minerals industry.

Leading CSRM and the UQ Rare Earth Consortium is Professor Saleem Ali, Director of the Centre. The World Economic Forum chose him as a “Young Global Leader” in 2011. He has also been selected by the National Geographic Society as an “emerging explorer” and was profiled in Forbes magazine in 2009 as “The Alchemist.” His most recent book is titled Treasures of the Earth: Need, Greed and a Sustainable Future (Yale University Press). Professor Ali received his doctorate in environmental planning from MIT.

TRAINING AND EDUCATION AT CSRM

Postgraduate Programs in Community Relations
The Minerals Council of Australia and the University of Queensland have partnered to develop a unique postgraduate program in Community Relations for the resources sector, which supports the professionalisation of practitioners working in this key area.

Short Courses and Workshops
These courses are tailored to suit individual groups, from frontline community relations practitioners, to community representatives and industry executives, and are designed to build capacity across the industry.

Postgraduate Research Opportunities
CSRM has an active research higher degree program. We offers honours, masters and PhD level research degrees in each of our areas of expertise, as well as cross-disciplinary research opportunities in collaboration with other centre’s within the Sustainable Minerals Institute.