



**Australian Government**  
**Department of Industry,  
Innovation and Science**

## **Successful Joint Research Centre projects funded under the Australia-China Science and Research Fund (ACSRF)**

### **Joint Research Centres (2011 - current)**

Australia-China Science and Research Fund (ACSRF) – Joint Research Centres (JRCs) are virtual centres that link Australian and Chinese research institutions conducting a portfolio of research-related activities in priority areas agreed to by the Australian and Chinese governments. ACSRf–JRCs link Australian and Chinese research institutions to build research capacity, maximise the application and commercialisation of research outcomes, and boost collaboration between researchers and industry.

ACSRf–JRCs' activities include:

- Joint research programs with Chinese partner/s
- Conferences, workshops and symposia
- Exchanges and secondments of personnel between Australia and China
- New research-related information sharing and communication initiatives

| Priority area                                             | Grant Type             | Project Title                                                                                 | Australian Govt. Funding | Project Description                                                                                                                                                                                                                                                                                                                                                                                                                                    | Australian Lead Organisation                           | Chinese Lead Organisation                                                                 |
|-----------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Energy                                                    | ACSRF 2011 JRC Round 1 | ANSTO - SINAP Joint Materials Research Centre                                                 | \$833,000                | This JRC will establish an Australian Chinese (SINAP) team focused on the development of materials suitable for an advanced Thorium Molten Salt Reactor (TMSR). The JRC will integrate Australian expertise in the development of materials for extreme environments with expertise within the Chinese Academy of Science (CAS) program of research on next generation power systems.                                                                  | Australian Nuclear Science and Technology Organisation | Shanghai Institute for Applied Physics, Chinese Academy of Sciences                       |
| Energy                                                    | ACSRF 2011 JRC Round 1 | Australia-China Joint Research Centre for Energy                                              | \$833,000                | The Australia-China Joint Research Centre for Energy will develop advanced energy technologies for improved energy security and reduced CO2 emissions from both countries.                                                                                                                                                                                                                                                                             | Curtin University of Technology                        | Taiyuan University of Technology                                                          |
| Engineering and materials science                         | ACSRF 2011 JRC Round 1 | Australia-China Research Centre for Light Metals                                              | \$833,000                | The Centre will bring together researchers from industry and academia in the field of light alloy development and processing, to develop new light metal alloys and energy-efficient manufacturing processes.                                                                                                                                                                                                                                          | Monash University                                      | Central South University                                                                  |
| Environment science                                       | ACSRF 2011 JRC Round 1 | Australia-China Research Centre on River Basin Management (water resources and water quality) | \$833,000                | The joint research centre (JRC) will provide both Australia and China with a new capacity to address national priorities for water resources management. This includes water catchment management, water productivity, environmental and rural community sustainability as well as technical and research capacity in these areas.                                                                                                                     | University of Melbourne                                | Department of Water Resources, China Institute of Water Resources and Hydropower Research |
| Agriculture and biological sciences                       | ACSRF 2011 JRC Round 1 | Australia-China Centre for Wheat Improvement                                                  | \$833,000                | The joint research centre will aim for consistency of supply of a high quality wheat product in order to impact on food security and the development of novel food products as well as increasing the marketability Australian wheat in China. The centre aims for (1) Australian wheat to penetrate the China market in speciality product areas, (2) Increase wheat yield by 1-2% through genetic, molecular marker and bioinformatics technologies. | Murdoch University                                     | The Chinese Academy of Agricultural Sciences                                              |
| Multidisciplinary projects related to sustainable futures | ACSRF 2011 JRC Round 1 | Australia-China Joint Research Centre for Minerals, Metallurgy and Materials (3-M Centre)     | \$833,000                | This joint centre will provide a platform to foster interdisciplinary collaborations between Australia and China to meet the challenges in the mineral, metallurgy and material industries which are of paramount importance to Australia and China. It focuses the R&D in raw material preparation, process metallurgy, material manufacturing and applications                                                                                       | The University of New South Wales                      | China Iron and Steel Research Institute.                                                  |

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| Food and Agriculture | ACSRF 2015 JRC Round 2 | Australia-China Joint Research Centre in Future Dairy Manufacturing                                              | \$1,000,000              | China is the most important market for the pivotal Australian dairy industry. With increasing demand in China for consumer-ready dairy products and the recent free trade agreement, the Australian dairy industry is well-positioned to massively grow our current 7% share of the market. This Joint Research Centre will provide the dairy industry with manufacturing process efficiencies and new high-value products, developing a strong link between Australia and the large distribution network in China | Monash University            | Soochow University              |
| Food and Agriculture | ACSRF 2015 JRC Round 2 | Australia-China Joint Centre of Grains for Health                                                                | \$1,000,000              | Grains are the most valuable output of the Australia agricultural sector. Grains and oilseeds contributed 33% of Australia's \$42.8 billion farm and fish food production, and 35% of \$31.8 billion agricultural product exports (Australian Bureau of Statistics). The Joint Research Centre of Grains for Health will develop cereal grains with health-promoting properties to minimize non-communicable diseases and maximize nutritional value for the benefit of both Australian and Chinese populations.   | The University of Adelaide   | Shanghai Jiao Tong University   |
| Food and Agriculture | ACSRF 2015 JRC Round 2 | Australia-China Joint Research Centre of Healthy Soils for Sustainable Food Production and Environmental Quality | \$1,000,000              | Soil is an integral component of the supply chain for food, fibre, and fresh water. The Centre will focus on soil resilience to threats such as drought, degradation and climate variability. It builds on existing collaborations between the Universities of Melbourne, Western Australia and New England, leading Chinese Universities and Institutes, CSIRO, Industry, and Government, and responds to an expressed industry need for improved soil sustainability and related food security tools.            | The University of Melbourne  | Chinese Agricultural University |

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| Marine Science                            | ACSRF 2015 JRC Round 2 | Sino-Australian Centre for Healthy Coasts a centre focused on the translation of data, information and models into management solutions for coastal pollution and ecosystem safety | \$999,999                | Managing multiuse coastal zones is a challenge for both China and Australia, with industrialisation, tourism, agriculture and aquaculture compounding pressures on coastal ecosystems. While both countries have invested in coastal observing and monitoring programs there remains an urgent need to bridge the gap between science and management actions. The JRC will develop novel approaches to integrate monitoring and models to develop practical management solutions for coastal regions.     | Australian Institute of Marine Science | Institute of Oceanology, Chinese Academy of Science                  |
| Marine Science                            | ACSRF 2015 JRC Round 2 | Australia-China Joint Research Centre for Maritime Engineering (ACCME)                                                                                                             | \$999,733                | The Australia-China Centre for Maritime Engineering (ACCME) aims to produce a new generation of models to more accurately forecast and describe ocean and wave behaviour. Bringing together the two leading international research groups in this area from Australia and China: this new knowledge would not only allow offshore industries to prepare and protect their ocean assets but also provide highly sophisticated modelling tools to predict ocean and wave climatology, extremes and trends   | The University of Melbourne            | First Institute of Oceanography of the State Oceanic Administrations |
| Mining equipment, technology and services | ACSRF 2015 JRC Round 2 | Australia-China Joint Research Centre for In-Line Chemical and Mineral Sensing for Sustainable Mineral Processing                                                                  | \$951,000                | The future sustainability of the mining industry requires that we be smarter in our processing of minerals. The ore deposits that host the valuable minerals are becoming more difficult to process, and this results in increased energy, water, and chemical use. The aim of this Centre is to enable miners to get more value for less effort, cost, and environmental impact through the use of novel sensors that tell them the mineral and chemical content at all stages of an extraction process. | University of South Australia          | Central South University                                             |