

InterRidge moves to Northern Germany

The port of Kiel, Germany is famous for the throngs of sailboats skiffing its surface waters in the sunny summer months, but for the next three years it will also gain recognition in becoming home base for an international organisation that studies the ocean's deepest water environment where the sun doesn't shine. **Kristen M Kusek reports.**



After spending the past four years in Tokyo University's Ocean Research Institute, Japan, InterRidge moved its office to the Leibniz Institute for Marine Sciences a few months ago under the chairmanship of Colin Devey, new head of the 'Dynamics of the Ocean Floor' research group.

'There is a willingness from the Institute leadership to support InterRidge in any way possible,' Devey said. The support means a lot to this 12-year-old organisation, comprised of 27 member countries and 2700 active marine researchers around the globe. InterRidge runs with a bare-bones staff of one chair, one office coordinator and one outreach coordinator, and harnesses its resources from various participating member countries to support the interdisciplinary study of ocean spreading centres.

Chris German is an InterRidge member from the UK. 'The great thing about InterRidge is that it allows you to pull together both the intellectual as well as the sea-going resources that no single nation could hope to achieve,' he said.

Well over half of all active volcanoes on Earth are situated around the spreading centres, which are called ridges. The ridges are unique places on the ocean bot-

tom where new crust forms; the seafloor splits apart and new lava bubbles up from the mantle. In and around these ridges are hydrothermal vents that look like chimneys and spew mineral-rich water sometimes hot enough to melt lead. Scientists find bizarre animals here that expand our definition of life as they make a home in a totally sunless environment with lots of toxic chemicals.

Scientists are excited about the potential this unique environment holds for medicine, industry and environmental clean-up strategies. Furthermore, as it is possible that life on Earth started around vent chimneys, Devey said: 'These deep-sea treasures could also hold the key to answering some fundamental questions about the origin of life and the possibility of life on other planets.'

'Germany has a thriving ridge community,' Devey said. He said his primary goals for InterRidge are to push for improved deep-ocean monitoring, expand the network of countries involved in

InterRidge (especially the eastern European, Southeast Asian and Southern Hemisphere states), and encourage education and outreach efforts to raise awareness of this ocean frontier.

'Ridge science is entering a fascinating time with long-term, real-time and continuous monitoring of the deep oceans becoming technologically and financially feasible. InterRidge represents a Mission to Planet Earth, establishing a presence in an environment that makes up 70% of the surface of our world. In many respects we have better monitoring capabilities on the Moon or Mars at present than we do on the deep-sea floor,' Devey said.

There is no question that InterRidge has its work cut out for it in the next three years, at which point the InterRidge steering committee will assess bids of member nations who wish to host the InterRidge office next. Devey said he's ready for the challenge.

Visit www.interridge.org for more information.

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The evolution of InterRidge

The Eureka moment that sparked InterRidge occurred when two countries using the same resource- and labour-intensive tools to visit the same place on the ocean floor realised that it made more sense to *share* resources than have to find ways to independently fund their own. It was 1992.

More than a decade later, InterRidge remains anchored by the principle of collaboration: It is an international organisation that pools the resources of its member countries to drive ridge research forward in a way that is cost-effective, cooperative and proven to be successful.

The first ten years of InterRidge produced a coordinated, international ridge community of member countries that had

previously been working alone, and left a load of success stories in its wake. Two examples are the first-ever mapping and sampling of one of the slowest spreading and remote centres known to date – the Gakkel Ridge in the Arctic Ocean, and the exploration and study of the South-West Indian Ridge.

Embarking on its second decade plan, InterRidge is currently 2700 researchers and 47 countries strong. The doors are wide open for more to join. The plan for the next decade plan (2004-2013) is three-fold:

- To continue to harness the energies of its member countries to drive ridge research forward

- To invite other countries to join in the initiative
- To raise public awareness of the ridge environment through education outreach initiatives.

The new InterRidge working groups – the teams that meet regularly in manageable groups and reflect current research priorities – include the following:

- Ultraslow spreading ridges
- Ridge-hotspot interaction
- Back-arc spreading systems
- Mid-oceanic ridge ecosystems
- Monitoring and observatories
- Deep earth sampling
- Global exploration
- Biogeochemical interactions at deep-sea vents