

# **GEOProcessing 2014**

## **Foreword**

The Sixth International Conference on Advanced Geographic Information Systems, Applications, and Services (GEOProcessing 2014), held between March 23-27, 2014 in Barcelona, Spain, brought together researchers from the academia and practitioners from the industry in order to address fundamentals of advances in geographic information systems and the new applications related to them using the Web Services. Such systems can be used for assessment, modeling and prognosis of emergencies. As an example, these systems can be used for assessment of accidents from chemical pollution by considering hazardous chemical zones dimensions represented on a computer map of the region's territory.

Geographical sensors and satellites provide a huge volume of spatial data which is available on the Web. Making use of Web Services, the users are able to provision and use these services instead of only performing document searching. These services are published in a directory and may be automatically discovered in a given context by software agents. Accessing large digital geographical libraries with geo-spatial information raises some challenges with respect to data semantics, interfaces, data accuracy and updates, distributed processing, as well as with discovery, indexing and integration of geographical information systems; this raise the issue of distributed catalogs forming a federation of spatial databases. Some spatial data infrastructures use service-oriented architecture for accessing these large databases via Web Services.

We take here the opportunity to warmly thank all the members of the GEOProcessing 2014 Technical Program Committee, as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to GEOProcessing 2014. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the GEOProcessing 2014 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that GEOProcessing 2014 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the areas of geographic information systems, applications and services.

We are convinced that the participants found the event useful and communications very open. We hope that Barcelona, Spain, provided a pleasant environment during the conference and everyone saved some time to enjoy the charm of the city.

### **GEOProcessing 2014 Chairs:**

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Claus-Peter Rückemann, Leibniz Universität Hannover / Westfälische Wilhelms-Universität Münster / North-German Supercomputing Alliance (HLRN), Germany

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