# IFIP Advances in Information and Communication Technology

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IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within ist member countries and to encourage technology transfer to developing nations. As ist mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is less rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is in information may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

Alain Bernard Louis Rivest Debasish Dutta (Eds.)

# Product Lifecycle Management for Society

10th IFIP WG 5.1 International Conference, PLM 2013 Nantes, France, July 6-10, 2013 Proceedings



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### Foreword

Since 2003, **PLM International Conference** (PLM IC) brings together researchers, developers, and users of **Product Lifecycle Management** (PLM), an integrated business approach to the collaborative creation, management, and dissemination of engineering data throughout the extended enterprises that create, manufacture, and operate engineered products and systems.

The conference aims to involve all stakeholders in the broad concept of PLM, hoping to shape the future of this field and advance the science and practice of enterprise development. From its inception, PLM IC has been the official conference of the International Journal of Product Lifecycle Management's Editorial Board (IJPLM, www.inderscience.com/ijplm). In 2009, PLM IC became the official conference of the IFIP Working Group WG 5.1 "Global product development for the whole lifecycle" (www.ifip-wg51.org).

**PLM13** was the 10<sup>th</sup> International Conference on Product Lifecycle Management. This year, the conference's overall theme was **PLM for society**.

With the help of the advisory board, the International Program Committee, the Organizing Committee, and not discounting the support of all our sponsors, the event offered a wide range from scientific presentations to technical demonstrations and industry visits to some of Nantes' leading high tech companies (such as Airbus, STX Europe and Euriware). The conference also offered an active social program with participants enjoying La Cité, the castle and the cruise on the Erdre River.

**PLM for society** was explored through a series of **topics**, which also formed the format of the proceedings:

- PLM for sustainability, traceability, and performance,
- PLM infrastructure and implementation processes,
- Capture and reuse of product and process information,
- PLM and knowledge management,
- Enterprise systems integration,
- PLM and influence of/from social networks,
- $\bullet\,$  PLM maturity and improvement concepts,
- $\bullet\,$  PLM and collaborative product development,
- PLM virtual and simulation environments,
- $\bullet\,$  Special session on BIM (Building Information Modeling).

One-hundred and eighteen abstracts were submitted and ninety-one papers proposed to the reviewers. Sixty-three papers were selected for presentation during the conference and are included in this proceedings book.

Six excellent keynotes, both from academia and industry, have contributed to open discussions amongst participants. Two of them are published in this book.

#### VI Foreword

The industry day was dedicated to PLM as envisioned by industry: its program was dedicated to papers from industry representatives. Five of them form the industrial papers chapter of this book.

As the last step of scientific and technical knowledge diffusion in the field of PLM, this proceedings book is the synthesis publication of the material shared with the attendees during PLM13.

August 2013

Prof. Alain Bernard Prof. Louis Rivest

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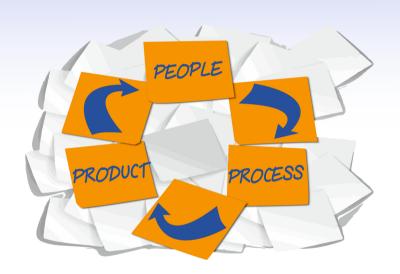
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