

IONMET & ProSurf MEETING

Munich, November 14, 2007



The PCB Market with New Challenges and Opportunities.

Michael Weinhold
EIPC Technical Director

European Institute of Printed Circuits





EIPC Dissemination Seminar

Morning: Program November 14, 2007

EU-Project “IONMET”:

- 09.45 - 10.00** **The PCB Market with new challenges and opportunities. Opening by Michael Weinhold, EIPC**
- 10.00 - 10.15** **Introduction of the IONMET framework Program**
By Khalid Shukri, Genacys Ltd., UK
- 10.15 - 11.00** **Introduction to Ionic liquids**
By Andrew Abbott, University Leicester, UK
- 11.00 - 11.30** **An overview on Ionic liquids and how aluminum can be plated.**
By Andrew Abbott, University Leicester, UK
- 11.30 - 12.00** **Will plating with Ionic liquids have an impact on PCB fabrication technology?**
By Michael Weinhold, EIPC
- 12.00 - 12.30** **Example: Electroless Silver Plating of PCB's**
By Andrew Abbott, University Leicester, UK
- 12.30 - 13.30** **Lunch (FREE OF CHARGE)**



EIPC Dissemination Seminar

Afternoon: Program November 14, 2007

EU-Project “ProSurf”:

13.30 - 13.45 Introduction ProSurf

By Ian Dalrymple, C-Tech Innovation, UK

13.45 - 14.15 ProSurf website: a special support and services for SME

By Uwe Koenig, Deutsche Gesellschaft für Galvano -und Oberflächentechnik

14.15 - 14.45 How to get successfully involved in EU R&D funding?

By Anthony Walker, RTC North, UK

14.45 - 15.30 Road map and technology developments including Material and Process developments for PCB's

By Michael Weinhold, EIPC

15.30 - 16.00 Q&A



The PCB Market in Europe with New Challenges and Opportunities

- **The EU as a market place for PCBs**
- **Europe is leading in the Environmental challenges**
 - **RoHS, WEEE, REACH**
- **Europe as a technology leader in fabrication processes and technology**
 - **Equipment, Automotive, Telecom ect...**
- **Use of the engineering capabilities to develop new materials and processes in Europe that:**
 - **Lower manufacturing cost and meet or exceeds environmental challenges**



Introduction: The EIPC activities and connections

- **The EIPC, it's members (135) and the impact for the PCB industry**
 - Cooperation with other association (IPC, CPCA, TPCA, HKPCA, JPCA, IPCA, VdL, FED, ICT and others)
 - WECC involvement and standards
 - The ECWC11 in Shanghai in March, 2008
 - Technology excursions to market places and fabricators in Asia
 - Watching the Market drivers in Europe
- **Networking to form partnerships in Europe and beyond**
- **Training about Standards and Technology to stay up to date with:**
 - Materials
 - Technologies and
 - Processes
- **EU sponsored Programs:**
 - The IONMET project. What is in for the PCB industry
 - The ProSurf project. How to benefit as a supplier and an OEM /EMS
- **Search for ways to improve the situation of the European PCB design, fabrication and assembly industry**



JISSO International Council Affiliations



**INTERNATIONAL
ECCA**

(European Electronic Components Association)

EU

JAPAN

USA



SIA



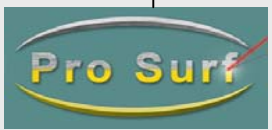
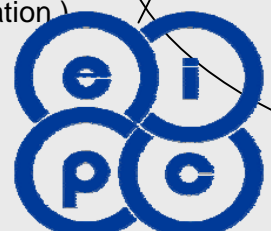
JEDEC



JPCA

JIEP
JARA
SEAJ

JEITA



IONMET - ProSurf Dissemination Seminar, Munich, Germany, November 14, 2007



The EIPC Web Site dedicated to the PCB technology in Europe

Welcome to the European link for PCB professionals!



November 2007

The European Institute of Printed Circuits (EIPC), based in The Netherlands, is an international service provider to the European Interconnection and Packaging Industry. Since 1968, the EIPC is servicing about 130 member companies, including suppliers of machinery and materials to the PCB Industry, PCB Manufacturers, contract electronics manufacturers and OEM's.

Mission statement:

'The EIPC is a network of PCB professionals providing platforms to exchange business and technology information for the success of the European electronics industry'.

Click on the menu items on the left and learn more about our services and products.

NEW! EIPC Winter Conference Rome 2008

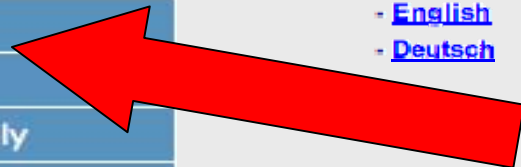
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- [English](#)
- [Deutsch](#)

- Provide easy access
- Allow for fast market update and follow up

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The change of the EU in 2007

-  Austria
-  Belgium
-  Bulgaria
-  Cyprus
-  Czech Republic
-  Denmark
-  Estonia
-  Finland
-  France
-  Germany
-  Greece
-  Hungary
-  Ireland
-  Italy

EUROPE has 47 Countries (727

million inhabitants)

Albania, Andorra, Armenia, **Austria**, Azerbaijan, Belarus, **Belgium**, Bosnia and Herzegovina, **Bulgaria**, Croatia, **Cyprus**, **Czech Republic**, **Denmark**, **Estonia**, **Finland**, **France**, Georgia, **Germany**, **Greece**, **Hungary**, Iceland, **Ireland**, **Italy**, **Latvia**, Liechtenstein, **Lithuania**, **Luxembourg**, Macedonia, **Malta**, Moldova, Monaco, Montenegro, **Netherlands**, Norway, **Poland**, **Portugal**, **Romania**, San Marino, Serbia, **Slovakia**, **Slovenia**, **Spain**, **Sweden**, Switzerland, Ukraine, **United Kingdom**, Vatican Cit

-  Latvia
-  Lithuania
-  Luxembourg
-  Malta
-  Netherlands
-  Poland
-  Portugal
-  Romania
-  Slovakia
-  Slovenia
-  Spain
-  Sweden
-  United Kingdom

Countries under

EU Regulations are 27

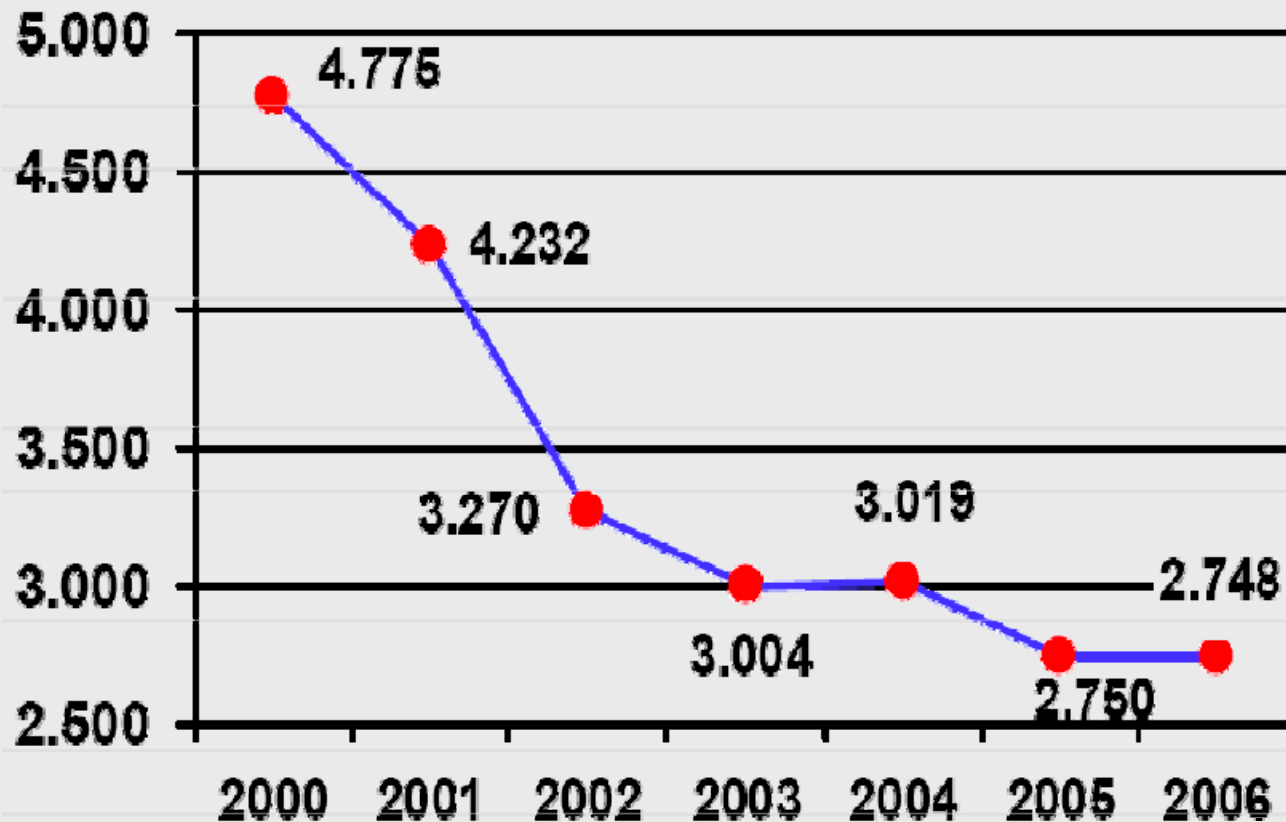
with 22 official languages



The importance of the PCB industry in the SME field in Europe

Million €

98 Pages in 50 Sprea

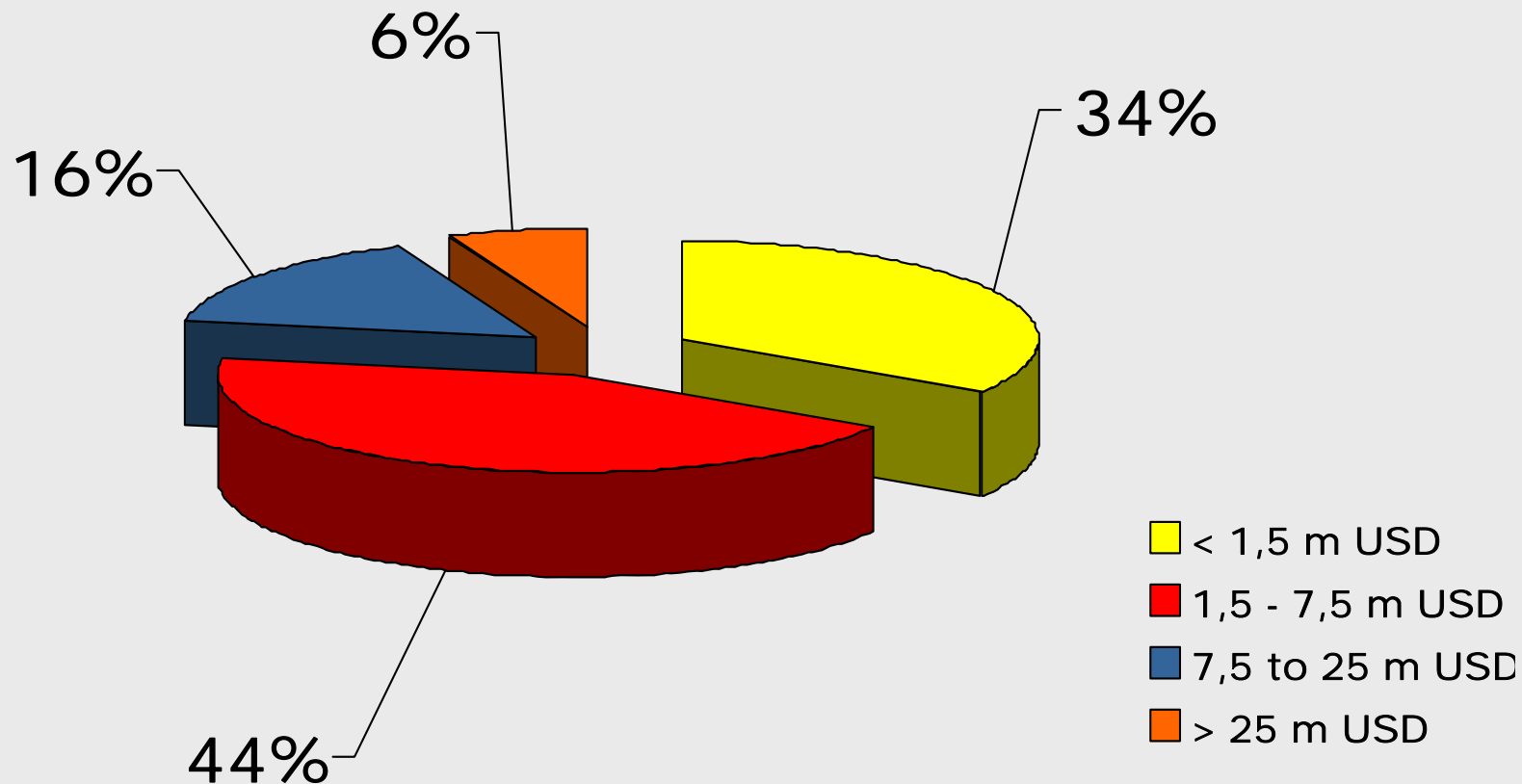


Data source: M.Gasch / VdL

- About 425 companies producing PCBs
- 23000 people employed
- Most companies classify for “SME”



PCB fabricators and split in turn over



Europe Total ~ 425

Data source: IPC / M.Gasch / VdL



WECC and IEC Standards meeting in Tokyo June, 2006

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.



World Electronic Circuits Council

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TIFF (Uncompressed) decompressor
are needed to see this picture.





The PCB situation in Europe

- **The PCB design and fabrication situation in Europe**
 - **How many new PCB are designed and manufactured in Europe today?**
 - **Do the standard processes for surface finishes and plating meet industry needs and are RoHS and environmental compliance?**
 - **Can the installed fabrication technology meet or exceed the present and future tolerance requirements for a cost effective PCB manufacturing and sourcing**
 - **Do the designed PCB fulfill the needs for global sourcing?**
 - **What alternative technologies are may be needed?**



Support by the European Commission

- **Get exposed to new technology with the “IONMET” project for the new ionic liquid technology**
 - **Better understand the option by working with Ionic liquids in plating and surface finishes**
- **Learn about the ProSurf project for standard plating and for a specific road map for the PCB industry covering 10 years:**
 - **Processes**
 - **Materials**
 - **Alternative technologies**



Free copy of the EU ProSurf sponsored PCB road map (1)

Dissemination of information concerning PCB technology and surface finishes
European Printed Circuit Technology Road Map 2007 - 2017
With particular emphasis on Small-to-Medium Enterprises



Project no. 023270

“ProSurf” Deliverable D7 Road Map Defining Future Research Strategy

Due date of deliverable: Month 21

Actual submission date: August 31, 2007

Start date of project: 01/09/2006

Duration: 36 Months

Organization name for dissemination of information in the PCB Industry: EIPC

Promotion and Support of SME Research and Innovation in the Surface Finishing and Printed Circuit Manufacturing Sectors

EIPC Prosurf Report September 2007



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Free copy of the EU ProSurf sponsored PCB road map (2)



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Technology education for PCB - Designer, - Fabricator and and -Assembler

EIPC European Institute of Printed Circuits
6th EIPC China Technology & Info Tour
Participate at the ECWC11
 See the CPCA Show & meet China's leading PCB-Fabricators

WECC
 World Electronic Circuits Council
 The EIPC is the European representative at the WECC

ProSurf
 IONMET

Event Dates: 16-22 March 2008
Location: Shanghai / China

Benefit from the following opportunities and combine them in one trip:

- Learn about the Chinese fabrication capabilities of the PCB and EMS industry during the 6th EIPC Technology Trip to China that EIPC
- Participate at the Electronics Circuits World Convention (ECWC11), the key PCB information, trend and technology event in 2008
- Listen to about 100 Technical/Management papers
- See the CPCA 2008 Show, the Number 1 show in Shanghai / China
- Network with over 1500 specialists from the PCB industry in China

Technologist and managers who wants to attend the ECWC conference, and have a day at the CPCA Show, can do that. The production manager who wants to see the latest equipment and systems on offer, as well as look at how PCBs are made in China, can do that. The strategist who wants to meet manufacturers in China to form an alliance, can do that.

Electronic Circuits World Conventions are the ultimate in convivial convocations, and in the small world of printed circuits, a larger world of opportunity awaits in Shanghai.

EIPC are offering a very flexible range of packages which will suit anyone who knows that it is important to be there, but whose requirements vary according to their time available and their wish-list.

● Package 1: Full Package EIPC/IPC Members rate: € 2,250.-	NON-Members rate: € 2,550.-
● Package 2: Conference Package EIPC/IPC Members rate: € 1,300.-	NON-Members rate: € 1,650.-
● Package 3: Company visits Package EIPC/IPC Members rate: € 1,600.-	NON-Members rate: € 1,950.-

Limited space is available. Registration on "first comes first serve" basis with preference to EIPC members

For more details contact the EIPC: Website: www.eipc.org
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 Phone: 0031-43-3440872 Fax: 0031-43-3440873 E-mail: kwestenberg@eipc.org

- Learning about Asia as a manufacturing country
- Experiencing the manufacturing capabilities
- Get the know how to deal with the Asian challenges



Thank you for your attention