



**inEMI**

International Electronics Manufacturing Initiative

# Advanced Materials Research Projects

*Productronica  
Conference Room A21*

*Tuesday, 13 November*

Advancing manufacturing technology

# Agenda

<b>10:00</b>	<b>iNEMI Overview &amp; Agenda Review</b>	<b>Jim McElroy, iNEMI</b>
<b>10:10</b>	<b>Thrust Areas and Materials Projects</b>	<b>Bob Pfahl, iNEMI</b>
<b>10:20</b>	<b>iNEMI Nano-Solder Project</b>	<b>Ning Chen Lee, Indium</b>
<b>10:50</b>	<b>Materials for Printed Electronics</b>	<b>Andreas Schaller, Motorola</b>
<b>11:10</b>	<b>Nano Attach Project</b>	<b>Grace O'Malley, iNEMI</b>
<b>11:30</b>	<b>Halogen Free Project</b>	<b>Bob Pfahl, iNEMI</b>
<b>11:45</b>	<b>Introduction to Next Steps on Pb-Free</b>	<b>Jim McElroy, iNEMI</b>



# **iNEMI**

International Electronics Manufacturing Initiative

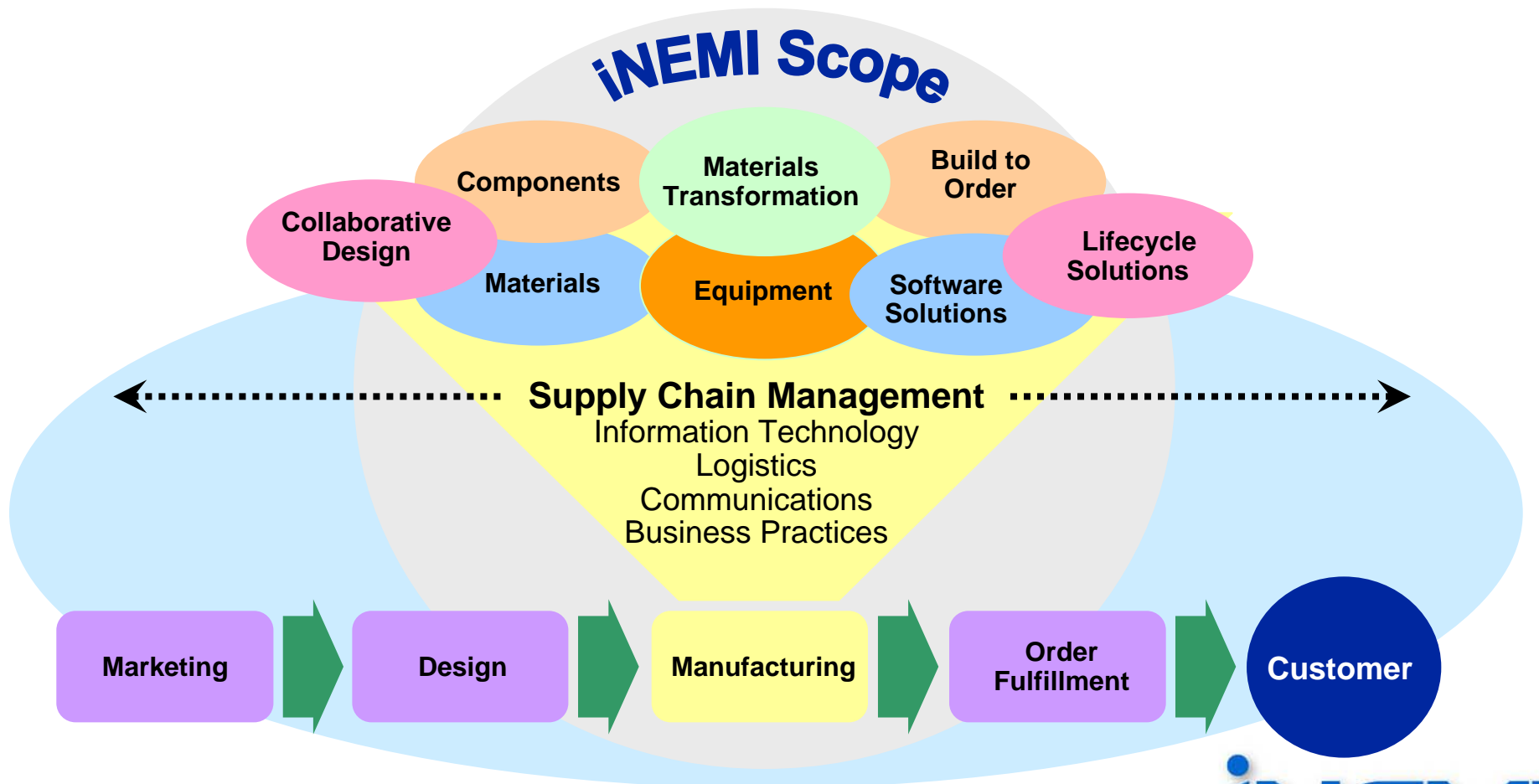
## **Overview & Agenda Review**

*Jim McElroy*

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# iNEMI Mission

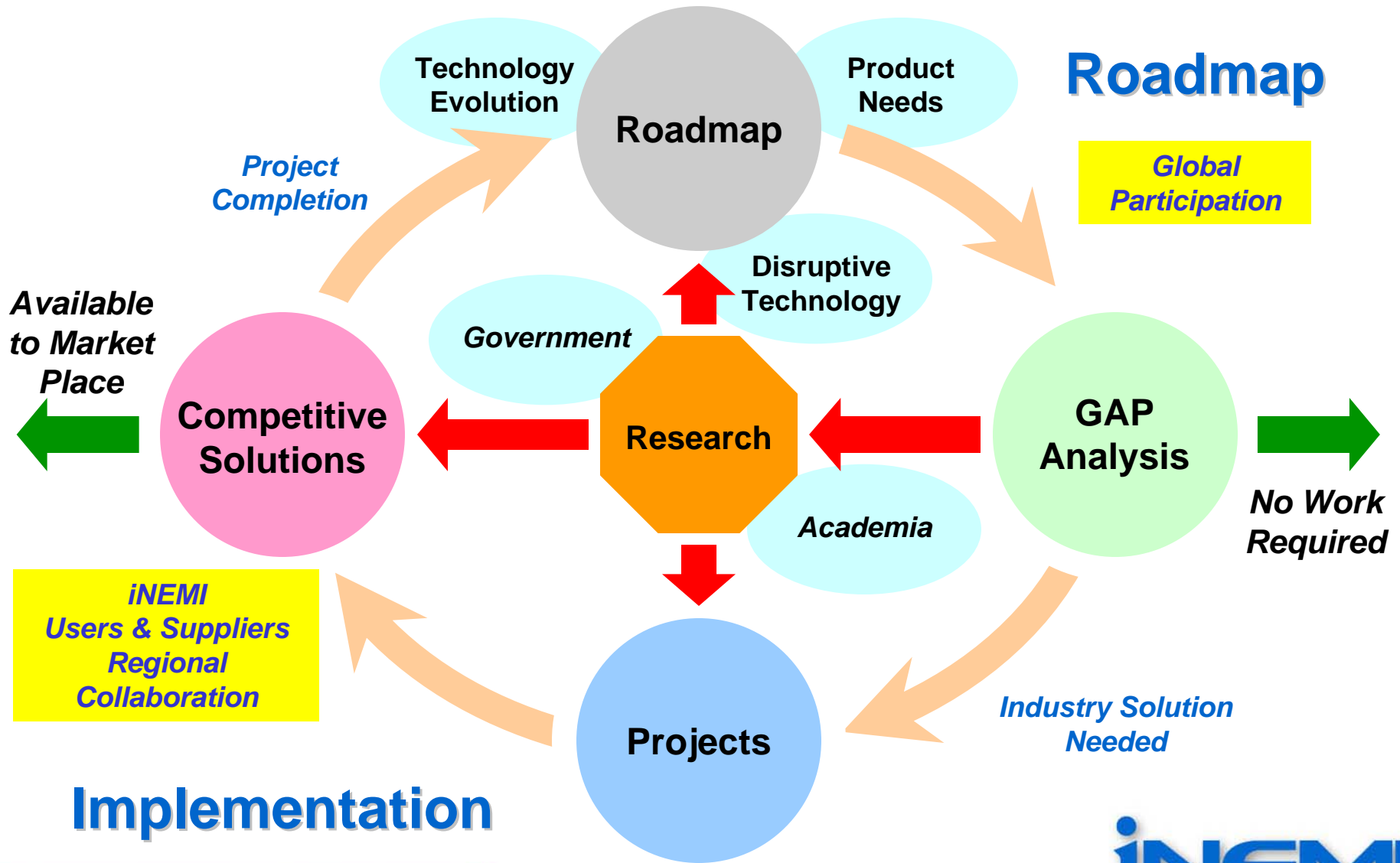
Identify and close technology gaps, which includes the development and integration of the electronics industry supply infrastructure.



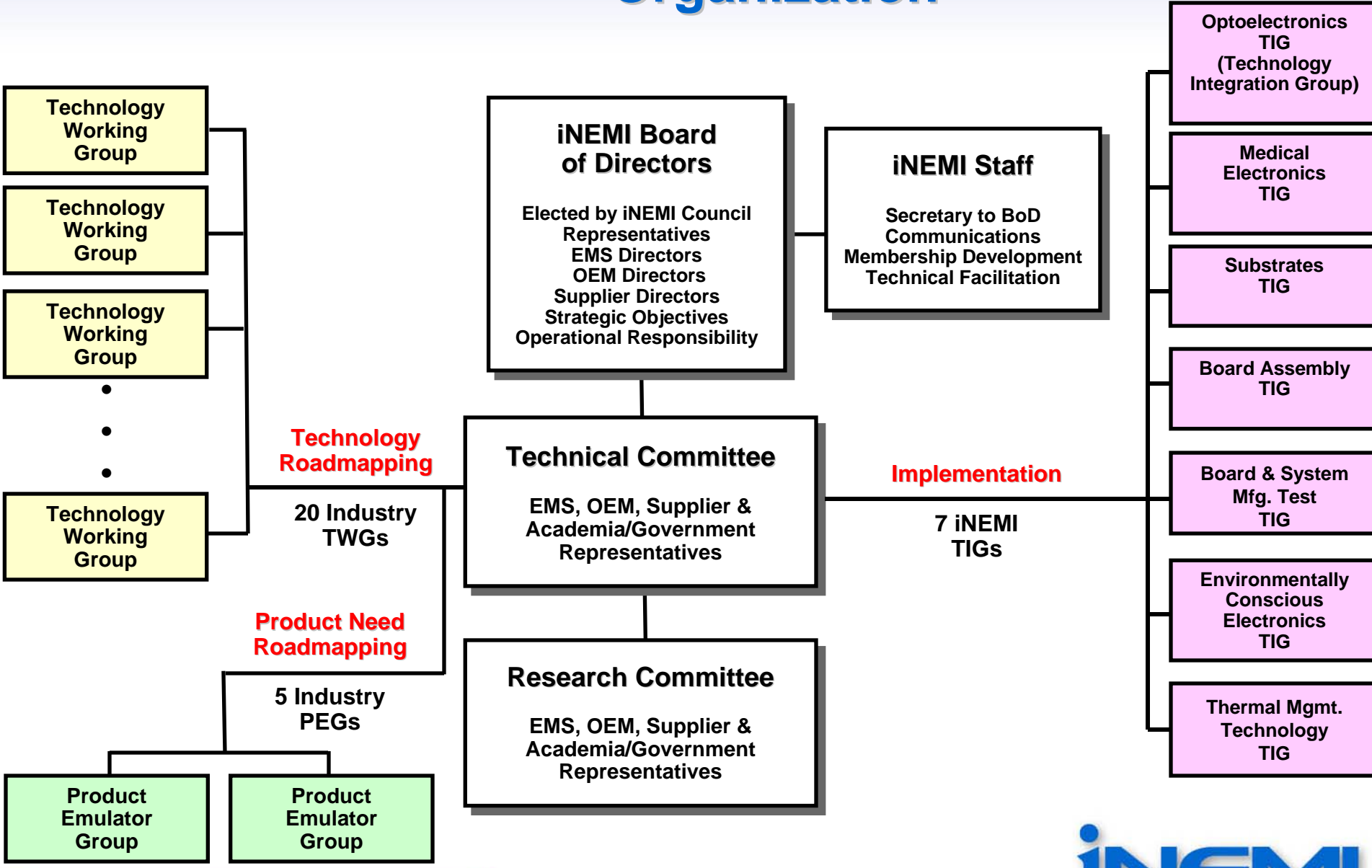
# Collaboration Environment

- **Organization:**
  - 501 (c) (6) not-for-profit, R&D Consortia
  - Collaboration framed by organization by-laws, intellectual property policy, and project agreements.
- **Anti-trust Considerations:**
  - Anti-trust guidelines used to bound collaboration between competing firms.
  - Anti-trust laws are complied with.
- **Capabilities/services:**
  - Support to help organize & manage projects
  - Teleconference & WebEx
  - Project specific Information (web/ftp sites)
  - Monthly Member Newsletter
  - Project meetings at appropriate industry venues
  - Project report publication
  - Relationships with other Organizations
    - Roadmapping
    - Standards
    - Joint projects

# Methodology



# Organization



# Board of Directors

## Directors

- 👉 Dr. Nasser Grayeli, VP of Assy Technology & Mfg., Intel – Chairman
- 👉 Dr. Marc Benowitz, Director Reliability & Eng. Infrastructure, Lucent
- 👉 Monroe Huang, Mgr. Mfg. Technology Dev. , Delphi Electronics & Safety
- 👉 B.J. Han, CTO, STATS/ChipPAC
- 👉 Dr. Katharine Frase, VP Technology, IBM Microelectronics
- 👉 Dr. Sundar Kamath, CTO Assembly Technology, Sanmina-SCI
- 👉 Minoru Okamoto, VP CCC Electronics, Tyco Electronics
- 👉 Jeroen Schmits, President, Universal Instruments
- 👉 Michael Toben, Director Pkg. & Finishing Technology, Rohm & Haas

## Ex officio Members

- 👉 Dr. William Anderson, Director, EEE Laboratory, NIST
- 👉 Fred Kuhlman, Co-Chair iNEMI Technical Committee, Delphi
- 👉 Jim McElroy, CEO, iNEMI
- 👉 Dr. Robert Pfahl, VP of Operations, iNEMI



# Key Accomplishments for 2007

- **Completed 2007 iNEMI Technical Plan.**
- **Completed 2007 Research Priorities.**
- **Supported members in RoHS/WEEE transition.**
- **Established projects in new thrust areas for iNEMI.**
- **Expanded iNEMI efforts to Asia & Europe.**
  - **Opened Asian office**
  - **Opened European Office**
- **Recruited leadership companies.**

# OEM/EMS Members



Alcatel-Lucent



CISCO



**ANALOGIC**

*The World Resource  
for Health & Security Technology*



HUAWEI



**DELPHI**

invent



Boston  
Scientific

*Delivering what's next.™*



**Medtronic**

*Alleviating Pain · Restoring Health · Extending Life*

**Microsoft**

**JABIL**



MICRO SYSTEMS  
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**SOLECTRON**



**Sun**  
microsystems

**INEMI**

# Supplier Members



Ciba



# Association/Consortium, Government, Consultant & University Members



ASSOCIATION CONNECTING  
ELECTRONICS INDUSTRIES®



**NIST**

National Institute of Standards and Technology

Développement  
économique  
et régional





# iNEMI

International Electronics Manufacturing Initiative

## iNEMI Europe

*Jim McElroy*

*iNEMI*

*October 11, 2007*

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# 2007 Priorities for iNEMI Europe

- **Grace O'Malley is iNEMI Manager of Operations-Europe**
  - **Previously Manager of the Motorola Advanced Technology Center, Jaguariuna, Sao Paulo, Brazil.**
- **Increase iNEMI Presence at Productronica**
- **Establish relationships with other organizations in Europe**
  - **Associations: AEA, IEEE CPMT, SMTA, IMAPS Europe, VDMA/OE-A**
  - **European Union**
  - **Universities & institutes: Fraunhofer IZM, IMEC, VTT etc/**

# Productronica Meetings

- **European Roadmap Kick-Off Meeting- Wednesday, 14 November**
  - Co-sponsored by IEEE's CPMT, Fraunhofer IZM, and IMAPS Europe.
- **3 Meetings on iNEMI Programs**
  - **iNEMI Advanced Materials Research Projects-Tuesday, 13 November, 10:00-12:00**
  - **Development Needs for High Reliability Pb-Free Electronics-Tuesday, 13 November, 13:30-17:00**
  - **Medical Electronics Technical Plan-Thursday, 15 November, 10:00-12:00**
- **2 Medical Electronics TIG project meetings, at Productronica and TI**
- **2 Forum Presentations**
  - **2007 iNEMI Research Priorities and 2009 Roadmap-Tuesday, 13 November, 14:00-14:30**
  - **The Optimization of Pb-Free Soldering-Wednesday, 14 November, 15:00-15:30**



[www.inemi.org](http://www.inemi.org)

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