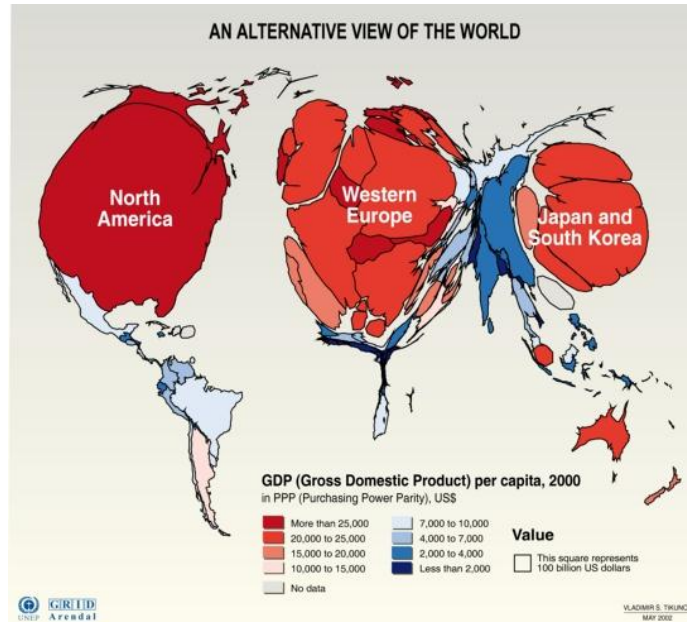


# “Global Perspectives on Cooperating Research”



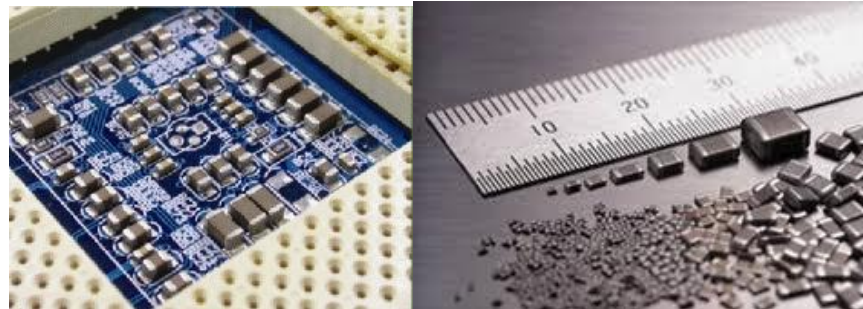
Clive A Randall  
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Pennsylvania State University  
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# Vision of CDS

# Members

“The Center for Dielectric Studies (CDS) plays a leadership role in the development of next generation electronic components and in scientific training to advance the understanding of materials in devices.”



# Fostering interactions with international Companies ?



- 1) Identification of Potential International Members go for the **technology leaders** in the field with also a **strong scientific** appreciation in company.
  - a) Track potential Members through **patent activity, conference attendance, publications** and companies that **support scientific fellowships and conferences**.
  - b) Work-with your Industrial Advisory Board to Guide International Recruitment**
  - c) Make approaches with **joint letter from Site Director and IAB Chair**- approach at a high technical level (General Manager and above) in each company.
- 2). Point to **International leadership of the Faculty** in the Center and major contributions to the field that a potential company member would be familiar.
- 3). Be sensitive to the fact that international companies have there own domestic university relationships and consultants.
- 4). Be willing to have a IAB meeting internationally- link with international conference, or a members commercial workshop to minimize travel costs for all parties.

# CDS Marketing of Research to International Partners?

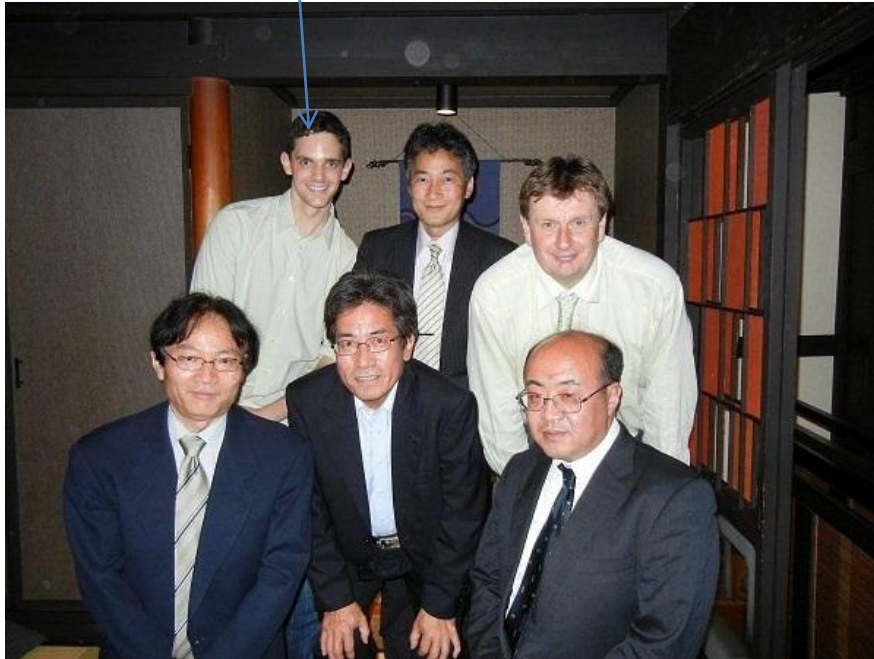


- (1). Embrace **Fundamental Scientific Issues** that limits present and future product performance
  - a) New Processing Approaches (we have developed novel furnace technologies)
  - b) New Materials or Compositions prototyped in the Center
  - c) New Characterization Approaches
  - d) Scientific Approaches to Reliability (New Predictive Equation for Lifetime)
  
- (2). Create a Cultural of Scientific **Leadership** and Establish Novel **Networking Opportunities**
  - a) Recruit Members within a supply change
  - b) Recruit Leading Competitors (Long-term Vision)
  - c) Focused Advanced Workshops
  - d) Novel Measurement Tool Development (Understanding and QC testing)
  
- (3). Laboratory **Open Access** in Center:
  - a). Company Visiting Scientists (3 to 4 ) on 2 year cycles) - \$25k per year
  - b). Student Visits to Companies
  - c). Directors Visit for one –two day discussion (**free - consulting**) – 12-18 month.

# Multiple International Student Experience- Globalizing Engineering Education

Russell Maier – 6 months at Murata R&D Center  
in Kyoto- EPR of Defect Complexes 2011-2012

Co-sponsored NSF I/UCRC and OISE  
2009



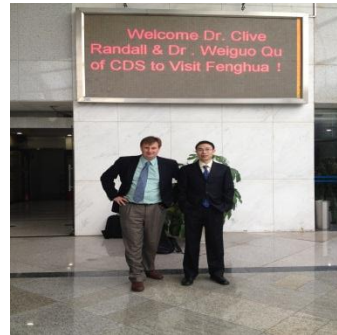
**NATIONAL SCIENCE FOUNDATION**  
**TOKYO REGIONAL OFFICE**  
*January 8, 2010*



# Do's and Don'ts in an International IAB



1). Regular Technical Discussions and Visits especially from Director and Associate Directors.



(Utilize Native Speakers )

- 2). Make sure that the Research is **Complementary and is sufficiently basic and/or far reaching ( 5 to 15 years).**
- 3). **Utilize the IAB** to aid in the approach of new international companies.
- 4). Directors/ Faculty have to do their **homework prior to visit.**

- 1). Consultation from Director and/or Co-Director amongst selected IAB Favorites and obtaining financial gain.
- 2). Reveal non-public information about a company in the Center -(Including Project Interests within the Center)
- 3). **Have conflicts with Core I/UCRC Research program in the development of Spin-offs**

