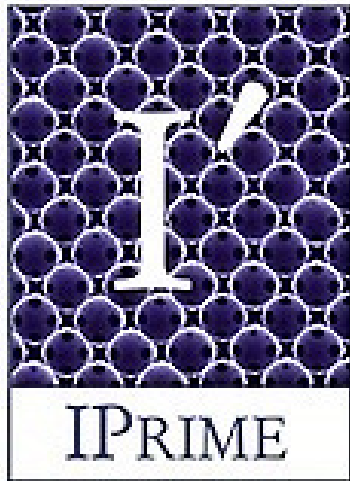
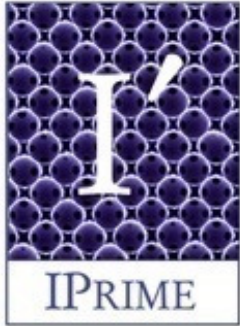




IPRIME

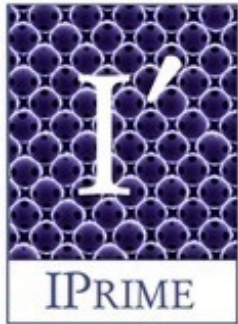


- Industrial
- Partnership for
- Research in
- Interfacial and
- Materials
- Engineering



IPRIME History

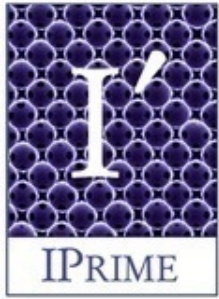
- CIE (Center for Interfacial Engineering)
 - Funded by NSF from 1988 to 1999
 - Industrial outreach, 114 resident fellows
 - Fostered a culture of integrated research, education and industrial interaction
- Members encouraged continued collaboration
- **IPrime** (Industrial Partnership for Interfacial and Materials Engineering)



IPRIME

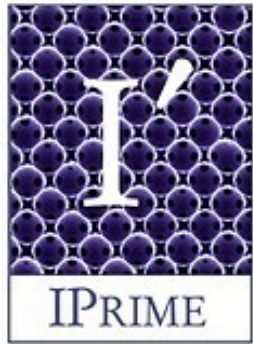
University-Industry Partnership
based on Two-Way Knowledge Exchange

- **Highly Interdisciplinary** (54 faculty in 9 departments)
 - Biochemistry, Molecular Biology and Biophysics
 - Biomedical Engineering
 - Bioproducts and Biosystems Engineering
 - Electrical and Computer Engineering
 - **Chemical Engineering and Materials Science**
 - **Chemistry**
 - Mechanical Engineering
 - Pharmaceuticals
 - Physics
- **Pre-Competitive and Non-Proprietary**
- **8 Research Programs**
 - 4 MRSEC and 4 others
 - One of the largest MRSECs
 - ~\$3 million per year (6 yr grant – renewal 2014)



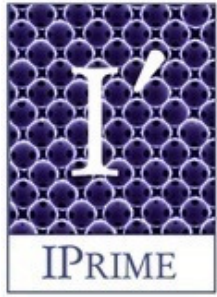
Research Programs

- Biocatalysis and Biotechnology (BB)
- Biomaterials and Pharmaceutical Materials (BPM)
- Coating Process Fundamentals (CPF)
- Magnetic Heterostructures (MH) - MRSEC
- Microstructured Polymers (MP) - MRSEC
- Nanostructural Materials and Processes (NMP)
- Organic Optoelectronic Interfaces (OEI) - MRSEC
- Renewable Energy Materials (REM) - MRSEC



Industrial Support

- More than \$1,800,000 per year in contributions from over 50 companies
- Sponsor Membership (\$50,000 per year)
 - Participation in up to 4 research programs
 - Possibility of an Industrial Fellow
 - Participation on the Policy and Planning Board (PPB)
- Affiliate Membership (\$40,000 per year)
 - Participation in one 1 research program, no Industrial Fellow
- Small company option
 - \$7,500 minimum
 - Or 0.03% of sales per year, up to \$40,000



IPRIME Member Companies



Agilent Technologies

AsahiKASEI

ASHLAND



CooperVision

CORNING

DNP



The miracles of science™

EASTMAN

ECOLAB



EVONIK INDUSTRIES

ExxonMobil



Hearing Components
Experts In The Ear Canal



HERSHEY'S



HYSITRON



LORD
AskUsHow™



Medtronic
When Life Depends on Medical Technology



National Institute of Standards and Technology



NITTO DENKO



Panasonic
ideas for life



سابك
sabic

SAGE
ELECTROCHROMICS, INC.



Sandia National Laboratories

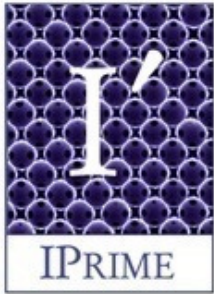
Schlumberger



'TORAY' Innovation by Chemistry



valspar
if it matters, we're on it.™



How does I' help innovation?

- industrial partners are asked hard questions
- learn new levers to pull
- meet people, topics never would see
- direct competitors talk about common challenges

- bring in new ideas for research
- keep faculty grounded in real world
- polished, employable students
- unrestricted funds for faculty
 - Initiate a blue sky project
 - Bridge between major grants

- foster a culture of integrated research, education and industrial interaction



Factors Affecting Success Staff/Structure

- embrace “customer focus” (make it easy for industry to do business with you)
- understand R&D management issues
- bridge the gap between pure and applied science
- foster a collegial culture
- open approach minimizes legal wrangling