

Control Division Research Committee on Future Control Technology

Goal

- •Research on and calling for technology seeds that matches industry needs
- Investigation and proposal of expected future control technologies in view of wide range of industry

Background

- •Lack of communication on needs, seeds, constraints and so on between industry and universities
- Technical matters such as topics, problems, solutions etc. are not shared enough among industry
- Encourage collaboration among universities and industry

Strategy

- Clarifies needs of industry
- Share problems, expections etc. among industry
- Understanding of statistical, optimizationbased and other approaches

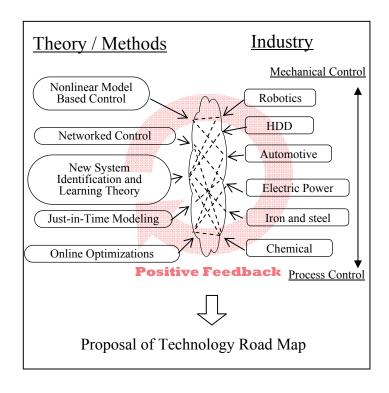
Activity Plan

- •4 semi-closed workshops for each year
- Proposal of organized sessions to annual conferences, joint conferences and so on
- Proposal of technology road map

Keywords

- 1) future control technology
- 2) communication and understanding
- 3) new horizon of collaboration

| years | Theory on Control and Optimizations (University) | Control Applications (Industry) |
|-------|--|---|
| 1980 | H-infinity Control Model Predictive Control | 2DOF PID, LQ Observers, Al-methods |
| 1990 | LMIs Nonlinear Control | H-infinity Control, ILQ Model Predictive Control |
| 2000 | Networked Control Hybrid Systems | Just In Time Modeling Model based Control |
| 2010 | Technology Road Map? | |
| 2020 | reciniology | Troug Trup; |



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Member: 15 industry and 9 university members