

## **Technology and/in the history of industrial research and development**

Organizers: Joris Mercelis (Johns Hopkins University), Michael C. Schneider (University of Düsseldorf), and Mila Davids (Eindhoven University of Technology).

Since at least the 1980s, the history of industrial research and development (R&D) has served as a key area for examining relationships between technology, science, and industry, and for studying the significance and organization of ‘high-tech’ innovation and intellectual property management in late nineteenth- and twentieth-century economies. By now, there is a relatively robust historiography that documents and interprets major trends and changes in individual countries including the United States, Germany, the United Kingdom, the Netherlands, Italy, and Japan. Many other countries have, however, received far less attention; and efforts to identify broader international patterns or study the globalization of industrial R&D activities have remained relatively rare as well.

This session wants to reconsider and re-emphasize the significance of industrial R&D as a valuable research topic for historians of technology, while simultaneously reflecting on ways to extend scholarship on this subject in promising new directions. We especially encourage paper proposals covering at least one of the three thematic areas identified below. In cases where a topic description leaves room for other approaches, we particularly welcome international or global perspectives.

### *(1) R&D in historical and global context*

- The status of events such as World Wars I and II or the start of the Cold War as real or perceived turning points in the history of industrial R&D. For instance, how did the confiscation and transfer of patents as part of reparation regimes after 1919 affect the R&D capacity of both receiving and delivering firms? To what extent did the Iron Curtain sever formerly established co-operations between researchers, e.g., in Hungary and Austria? And how was industrial R&D pursued under the conditions of centrally planned socialist economies?
- The role of transnational and global connections, collaborations, and knowledge flows in shaping national, regional, or sectoral histories of industrial R&D. In this respect, we also welcome proposals considering the impact of patent laws, antitrust legislation, and/or other legal aspects on the organization and internationalization of industrial R&D.

*(2) R&D at the crossroads of different fields, values, and needs*

- Relationships and tensions between technological, scientific, national security, and/or commercial goals, values, and considerations evident in histories of industrial R&D. Among other things, this could include analyses of different approaches to secrecy and intellectual property management, or of contrasting perspectives on the need (or lack of need) for ‘basic research’ and international scientific collaboration.
- The balance between pursuing technological innovation and maintaining a strong intellectual property and competitive position in established markets, besides other forms of ‘maintenance.’ In this connection, we also invite proposals exploring how R&D intensive firms have contributed to, and been affected by, powerful perceptions and ideas concerning the nature and importance of invention, innovation, and intellectual property. To what extent, for example, did firms’ public celebration of science-based innovation reflect a genuine belief in a unique power of science in generating new technologies?

*(3) Working in R&D*

- The job conditions of industrial R&D workers, including women and minority engineers and scientists. This could range from studies of hiring and remuneration practices and/or everyday job routines to examinations of surveillance strategies and cases of espionage.
- The participation (or lack of participation) of industrial R&D workers and their firms in broader networks of knowledge and innovation, including collaborations with customers, suppliers, and/or outside inventors, consultants, and scientific organizations. In this respect, studies of work practices and restrictions in joint R&D ventures or international R&D consortia would be most relevant as well.

Paper proposals are due by March 25 and should include an abstract of maximum 500 words and a short, one-page CV. Proposals can be submitted via email to [jmercelis@jhu.edu](mailto:jmercelis@jhu.edu).