INTRODUCING THE NEW ASIAN CASE METHOD TO MICRO- AND NANOTRIBOLOGY

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Several attempts have been made to increase the innovation capability of university graduates and researchers. Unfortunately, most of these attempts fail. Sentences such as the following tend to appear in final project reports: "The science went well, we published various papers in high impact journals, we met interesting people from around the world and established tight networks. However, we are still working on turning the ideas and concepts developed in the project into applications for the real world." Which most of the time never happens, because the next project is being started.

Our presentation will deal with this gap between science/engineering and successful application, and stress the potential role-model function of people working in micro- and nanotribology, a highly interdisciplinary field where tribologists, physicists, chemists, material scientists, micro/nano- and miniature system engineers are jointly developing theories, simulations and final applications that benefit society. Tribology is inherently application oriented; in course of such development, scientists, engineers and business people meet and decide the way forward. They highlight recent developments and identify emerging and future areas of micro/nanotribology research. Tribologists can teach other scientists about their ways of doing things. Which can be improved, of course: We propose - inspired by the trademark of professional education of the Harvard Business School - introduction of the New Asian Case Method: discussion focused on real-world situations and guided by skilled generalists will better prepare specialist students (and researchers) for a successful professional life than would lecture and theory (or publications and presentations) alone.

Benefits would be two-fold: The case method will increase the innovation potential in micro- and nanotribology research and development, by structuring the ways of thinking and approaching problems in the contributing students/researchers/engineers/business people, AND by establishing the case method in tribology, for more efficient transfer to other fields of science and engineering.