國立清華大學第 9 屆傑出產學研究獎得獎人簡介

動機系/奈微所玉山榮譽講座教授北森武彥

清大玉山榮譽講座教授北森武彥自 109 年 2 月 1 日起由台灣教育部任命為玉山學者，並由清華大學(清大)動力機械學系(動機系)新聘以及奈米工程與微系統研究所(奈微所)合聘。在此之前，北森教授於 1980 年獲得東京大學純粹與應用科學系的學士學位，於 1989 年獲得工學博士學位。他曾在日立擔任核能工程師，於 1989 年就職於東京大學，並將研究領域轉為分析化學，並成為開創微流體研究領域的學者之一。在擔任東京大學工學院院長後被任命為副校長，負責整個大學的國際化。北森教授發表期刊論文 300 餘篇，著書章節 50 餘篇。他目前的研究興趣包括微流體和奈米流體、以及微流體系統的大規模平行化工程。北森教授曾獲瑞士化學學會 Simon-Widmer 獎和兩次 IBM 學術獎等多項榮譽，並榮膺瑞典皇家科學院國際院士、隆德大學名譽博士。

北森教授近十年(2012-2022 年)共發表期刊論文 110 篇以及會議論文 147 篇，這些論文已被引用 2,600 餘次(引用資料來源: Google Scholar, 05/08/2022)。另外，近十年的論文引用次數為 9,760 次，總計論文引用次數為 18,592 次，足見北森教授長期持續的研發動能與其學術影響力。

北森教授除了在學術上的成就，並積極推動國際產學創新合作，包括鏈結台日雙方產官學研界、與日本知名化工公司 Daicel Corporation 進行多年期跨國產學研

究合作計畫、並成立由清大 spinoff 的「北森微流體研發股份有限公司(IMT-Taiwan)」，以將研發成果轉化並實現為商品。

北森教授於 2020 年 9 月 9 日當選為瑞典皇家科學院(The Royal Swedish Academy of Sciences)的國際院士，彰顯了對北森教授在工程及科學方面傑出成就的至高認可。瑞典皇家科學院成立於 1739 年，為一個非政府組織的獨立團體，其總體目標是促進科學發展並增強其在社會中的影響力。瑞典皇家科學院任命 175 名瑞典籍院士和 175 名國際院士，並以負責評選諾貝爾物理學獎、化學獎、經濟學獎而著稱。

Takehiko Kitamori received his BS degree in the Department of Pure and Applied Science in 1980, and his Ph.D. degree in engineering in1989, both from The University of Tokyo. He worked for Hitachi as a nuclear engineer and moved to The University of Tokyo in 1989. He changed his research area to analytical chemistry and pioneered microfluidics. He was appointed Vice President after serving as Dean of the School of Engineering at The University of Tokyo, and he was responsible for the internationalization of the entire university. The Ministry of Education of Taiwan appointed him as a Yushan Fellow, and he moved to National Tsing Hua University as Yushan Honorary Chair Professor in 2020. He is the author of more than 300 journal papers and has written more than 50 book chapters. His current research interest includes microfluidics and nanofluidics, extended nano space engineering, and large-scale parallelizing engineering of microfluidic systems. He was awarded many prestigious honors including the Simon-Widmer Award of the Swiss Chemical Society and twice the IBM Faculty Award. He is a Foreign Member of The Royal Swedish Academy of Science, and an Honorary Doctor of Lund University.

In the past ten years (from the year 2012 to 2022), Professor Kitamori has published 110 journal papers and 147 conference papers, which have been cited more than 2,600 times (citation source: Google Scholar, accessed on 05/08/2022). In addition, the number of citations of papers in the past ten years is 9,760 times, and the total number of citations of papers is 18,592 times, which demonstrates Professor Kitamori's long-term sustained research and development momentum and his academic impact. For a complete list of publications in the past ten years, please refer to Appendix 3.
In addition to his academic achievements, Professor Kitamori actively promotes international industry-university innovation cooperation, including linking Taiwan and Japan's industry-government-academia-research community, and a multi-year multinational industry-academia research cooperation plan with Daicel Corporation, a well-known Japanese chemical company, and established an NTHU spinoff company,

IMT-Taiwan Co., Ltd., in order to transform and implement the research and development results into commercial products.

Professor Kitamori was elected as a Foreign Member (Academicians) of the Royal Swedish Academy of Sciences on September 9, 2020, demonstrating the supreme recognition of Professor Kitamori's outstanding achievements in engineering and science. Founded in 1739, the Royal Swedish Academy of Sciences is an independent non-governmental organization whose overall goal is to advance science and enhance its influence in society. The Royal Swedish Academy of Sciences has appointed 175 Swedish academicians and 175 international academicians. Academicians can nominate candidates for the Nobel Prize and are known for their responsibility for selecting the Nobel Prize in Physics, Chemistry and Economics.

Before joining the Royal Swedish Academy of Sciences, Professor Kitamori was appointed as a foreign member of The Royal Physiographic Society in Lund in 2014, and was awarded an honorary doctorate by the Lund University in Sweden in 2016. He was invited to give speeches at the Royal Swedish Academy of Science Lecture (KVA Lecture) in 2011 and the Nobel Symposium in 2017.