

資料 1/2



受賞者：法政大学名誉教授 中野久松

学会名：米国電気電子工学学会 (IEEE)

会員総数 37 万人を有する電気電子工学系の最大規模の学会、本部は米国。

受賞名：IEEE・アンテナ伝搬ソサイエティ・顕著業績賞 (2016 年 6 月 29 日)

IEEE Antennas and Propagation Society “Distinguished Achievement Award”

受賞表題：アンテナに関する高度な電気磁気解析, および, 革新的なアンテナ設計と現代の通信システムのための新しいアンテナの実現

Citation: For in-depth electromagnetic analyses of antennas and for innovative antenna designs and their novel realizations for modern communication systems.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7769267#search=%27IEEE+nakano+hisamatsu+distinguished+achievement+award%27>

概要：本賞はアンテナ伝搬ソサイエティが贈る最高位の賞である。同ソサイエティは、長年にわたりアンテナ伝搬研究において顕著な業績をあげた者 1 名を、世界の研究者の中から選び贈賞している。以下の 5 項目が顕著業績賞の規準となっている。

- i. 電気磁気学における基礎理論およびその高度な応用への貢献。
- ii. アンテナ理論への貢献。
- iii. アンテナ解析・合成・設計に関する新方法論への貢献。
- iv. 電磁波伝搬の新解析法への貢献。
- v. その他のアンテナ伝搬分野における新しい貢献。

今回、上記を立証する 300 編を超える主要学術誌掲載論文、
400 編を超える国際会議講演論文、
10 冊の洋著書*

などが評価されて受賞に至った。業績の一部を以下に示す。

- [a] 5 つの電磁界積分方程式の創出と新解析法への貢献。
- [b] 広帯域アンテナの理論解析。
- [c] 新しい給電法（中野カップリング）の提唱。
- [d] 放送衛星受信用パラボラアンテナおよび平面アンテナの実現。
- [e] 天文学用・VERA アンテナの実現。
- [f] 超自然メタマテリアルアンテナの創造。
- [g] C 形状アンテナの創造と宇宙開発への応用。

本アンテナの搭載例：2001 年ドプラ測距装置搭載 H-IIA ロケット試験機 1 号機, 2002 年小型実証実験ミュウ - ラブサット衛星, 2009 年中軌道小型実証衛星 SOHLA-1, 2014 年中軌道小型ソクラテス衛星。

- [h] 日本 JAXA と欧州 ESA の共同プロジェクトである水星探査衛星搭載アンテナの創造。

補：日本人（日本国籍を有する者）としての顕著業績賞の受賞は初めてである。



*著書の一例

Low-Profile Natural and Metamaterial Antennas, Wiley and IEEE Press

2016 Distinguished Achievement Award

THE Distinguished Achievement Award was established in 1985 to recognize outstanding technical achievement and meritorious service to the IEEE Antennas and Propagation Society.

The 2016 award was presented to Hisamatsu Nakano “*For in-depth electromagnetic analyses of antennas and for innovative antenna designs and their novel realizations for modern communication systems.*”



Hisamatsu Nakano (M’75–SM’87–F’92–LF’11) received the Dr. E. degree from Hosei University, Tokyo, Japan, in 1974.

Since 1973, he has been with Hosei University, where he is now Professor Emeritus and a special-appointment researcher at the Electromagnetic Wave Engineering Research Institute attached to the graduate school of the same university. He has held the positions of Visiting Associate Professor at Syracuse University (March to September, 1981), and Visiting Professor at the University of Manitoba (March to September, 1986) and University of California, Los Angeles (September, 1986 to March, 1987). He has been invited to become a Visiting Professor at Swansea University, U.K., in 2016. His significant contributions are the development of five integral equations for line antennas and the realization of numerous wideband antennas, including curl, spiral, helical, and cross-wire antennas. His low-profile helical array antenna has been used as a primary feed for radio astronomy Cassegrain reflectors. It has also been adopted as a high-gain antenna for the Mercury Magnetospheric Orbiter. His other accomplishments include antennas for GPS, personal handy phone systems, space radio, electronic toll collection systems, RFID systems, UWB systems, and radar systems. He has been awarded 78 patents, including A Curl Antenna Element and its Array (Japan). He has published over 300 articles in major refereed journals, more than 400 international symposium papers, more than 1,550 national symposium papers and 10 books/book-chapters, including *Helical and Spiral Antennas* (Research Studies Press and Wiley) and *Analysis Methods of Electromagnetic Wave Problems, Volume Two* (Artech House). He is also the author of a forthcoming book *Low-profile Natural and Metamaterial Antennas* (Wiley and IEEE Press).

Prof. Nakano received the IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION H. A. Wheeler Award in 1994. He was also the recipient of the IEEE Antennas and Propagation Society Chen-To Tai Distinguished Educator Award in 2006, and was the recipient of the Prize for Science and Technology (from Japan’s Minister of Education, Culture, Sports, Science, and Technology) in 2010. He is an Associate Editor of several journals and magazines, such as *Electromagnetics* and the *IEEE Antennas and Propagation Magazine*. He has served as a member of the IEEE APS Administrative Committee (2000–2002), a Region 10 Representative (2001–2010), and an IEEE APS Short Course Lecturer (2007–present).