



INTELLIGENT AND RECOGNITIVE NANOSCALE SYSTEMS FOR A NEW GENERATION OF THERAPEUTIC APPLICATIONS

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KNOWN FOR HIS PIONEERING RESEARCH IN BIOMATERIALS, DRUG DELIVERY, BIONANOTECHNOLOGY AND MEDICAL DEVICES. HE SET THE FUNDAMENTALS AND RATIONAL DESIGN OF DRUG DELIVERY SYSTEMS.

HE IS THE INVENTOR OF NUMEROUS MEDICAL PRODUCTS INCLUDING CONTACT AND INTRAOCULAR LENSES, ARTIFICIAL KIDNEY MEMBRANES, CARTILAGE, AND DEVICES FOR ORAL DELIVERY OF INSULIN FOR TREATMENT OF DIABETICS, CALCITONIN FOR OSTEOPOROSIS AND INTERFERON BETA FOR MULTIPLE SCLEROSIS.

RECEIVED THE 2012 FOUNDERS AWARD OF THE NATIONAL ACADEMY OF ENGINEERING (NAE). AICHE HAS AWARDED HIM THE 2008 FOUNDERS AWARD, THE 2006 WILLIAM WALKER AWARD, THE 2008 INSTITUTE LECTURESHIP, THE 2007 JAY BAILEY AWARD, THE 1992 PHARMACEUTICALS AND BIOENGINEERING AWARD AND THE 1984 MATERIALS AWARD. AICHE INCLUDED HIM IN THE "100 CHEMICAL ENGINEERS OF THE MODERN ERA".

ONE OF THE MOST CITED ENGINEERS IN THE WORLD WITH 57,000 CITATIONS, HE HAS PUBLISHED 1,300 PAPERS AND 55 PATENTS AND HAS AUTHORED OR CO-EDITED 37 BOOKS.