BIOGRAPHY SKETCH

KANG WON HO

Emeritus Professor,
Department of New Materials Science and Engineering
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Kang won ho, He have received Ph.D of Engineering from Hanyang graduate University in Seoul Korea and obtained a qualified Professional Engineer of Ceramics of Government. He have worked for Samsung-Corning Co., Ltd. as a managing director of Central Res, Center for 15years from 1975. And then moved to Dankook University as Professor served 21years since 1989.

He have studied at Institute of Technical Training and Research Center of Corning, then he had researched and developed improvements of TV glass mfg. technology and new products such as Frit glass, ITO coating technology, Non Glare panel, Soft Ferrite, synthetic diamond , ceramic frequency filter, magnetron, IC Package etc. during Samsung-Corning days.

After he move to Dankook University in 1989, he founded the Institute of New Materials' Technology of Dankook University and managed the organization over 16 years as a director. He collaborate with Aachen University, the University of Scheller in Germany and Japan's Nagoya Institute of Technology. he has recorded academic papers over 129, published 12 academic books and 10 patents.

Academic institutions activities are founder and president of Korea Institute of Venture Technology (KIVT), KMEPS Society as president of Korea, Ceramic Society Regular member and 28th president by actively participating, member of Crystal Growth Society, Materials Research Society and the American Ceramic Society, Japan Ceramic Society, IMAPS Society and other international academic societies.

Based on the experience at Samsung-corning and University He contributed to the companies R&D and commercialization works, Samsung Corning R&D consultant, technical adviser at Pacific Development Co., Ltd., Consulting Professor of Daewoo Electronics, Technical Adviser of Samkwang Glass Co. Ltd., for the development of technology and new product.

After retired university in 2010, He is working to lecture on glass science technology in graduate school of university, consulting and advising R&D in industries, he has a keen interest in management of technology, the mega-trend of future society and fusion technologies.

Currently, He is a Emeritus Professor of Dankook University, Vice President of Korea Ceramic Association, Reseat Member of KISTI (Korea Institute of Science and Technology Information) and consultant of EcoCera company.

Won Ho Kang

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PERSONNEL

Born March 18, 1945
Korean Citizenship
Married, 5 Children
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EDUCATION

Institution	Degree	Date	Major Field
Hanyang University (Graduate School)	Ph. D	Feb. 1985	Electro Ceramics materials
Hanyang University (Graduate School)	MS	Feb. 1973	Refractory Engineering
Hanyang University (Ceramic Department)	BS	Feb. 1971	Ceramic Engineering
Government	Professional Engineer	Mar. 1980	Ceramic Engineering

EXPERIENCE

Emeritus Professor, Dept. of Materials Science&Engineering, Dankook University
Professor, Dept. of Materials Science&Engineering, Dankook Univ.,1989.9-2010.8
(Duties ; Teaching and research. Glass science & engineering.)
Dean for research affairs of Dankook University, 1997.1- 1999.6
(Duties ; Administrative supports for professors and students to research)
Director, Institute of New Material Technology(INMT) Dankook Univ.1990-2007
Managing Director, Research center of Samsung Corning. 1987.9-1989.8
Manager, Research Laboratory of Samsung Corning. 1975.9-1986.12
Lecturer, Engineering Field, Hanyang University 1987.3-1987. 8
Lecturer, Materials Science, Myung-ji University 1985.9-1987.8
Assistant Researcher, Ceramic Engineering Dept. Hanyang Univ.,1971.3-1973.2

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

President of the Korea Ceramic Society 2006.1-2007.12
President of IMAPS-K Society Korea, 1998.1-2002.12
President of Korea Institute of Venture Technology (KIVT), 2000.1-2002.12
Board Member, Korean Association of Crystal Growth. since1989.12
Board Member, Korean Ceramic Society, since 1971
Board Member, Materials Research Society, since 1991.2
Regular member of American Ceramic Society, since 1975
Regular member of IMAPS, since 1985

HONORS

Science Award, Korean Ceramic Association, 1997. 9.10
Science Advancement Award, Korean Ceramic Society, 1988.10 . 15
Academy Award, Korea Ceramic Society, 2006.4.
Who's who in the world, 2000.2

PATENTs (among 10)

Fabrication of low temperature firing substrate of glass-ceramics, 1998. 11. 23 (Korean patent No. 98-47556)

Chemical strengthening method of glass-ceramics in Li_2O-Al_2O_3-SiO_2 system, 1997. 10.28 (Korean patent No. 127958)

Fabrication of advanced low expansion glass-ceramics, 1997. 10. 27 (Korean patent No. 127921)

Fabrication of high strengthened glass-ceramics beads for dispersion, 1997. 8. 7 (Korean patent No. 97-37768)

New fabrication method of advanced glass-bead for road, 1996. 6. 22 (Korean patent No. 101046)

SELECTED PAPERS (From over 129 papers)

* K2O effect on the crystal structure and crystallization of fresnoite in BaO-TiO2-SiO2 glasses, Journal of Ceramic Processing Research, vol9, No.1, 22~27
* Preparation and Property of Nonlinear Optical Materials based on K2O-BaO-TiO2-SiO2 Glasses, Solid State Phenomena, vol 124-126, 479-482, 2006
* Preparation and Properties of Transparent Glass-ceramics in xK2O-(33.3-x)BaO-16.7 TiO2-50SiO2 Glasses, Ferroelectrics, 330vol.,9-18, 2006
* Proton-conductive membrances doped with orthophosphoric acid based on inorganic-organic hybrid materials, Journal of the American Ceramic Society, vol.,88, no.12, 3427-3432, 2005
* Ppreparation of K2O-CaO-P2O5 Eco -glass Fertilizers and Effect in Crops, Materials Science Forum(Designing, Processing and properties of Advanced Engineering), Vol.486-487,407-410, 2005
* Proton Conduction Behavior of a Novel Composite Based on Phosphsilicate /Poly(Vinyl Alcohol), Journal of korea Ceramic Society, Vol.42, No.2, 77-80, 2005
* Preparation and characterization of proton conductive phosphosilicate membrances, Bulletin of the Korean Chemical Society, Vol.26, No.2, 241-247,Feb.2005
* Effect of Nd:YAG laser irradiation on crystallization in Li2O-Al2O3-SiO2 glass, J. Am. Ceram. Soc.,84[10] 2433-35 (2001)
* Far-Infrared Emissivity of Ag2O-Li2O-CaO-TiO2-P2O5 Glass Ceramics with CuO, 17th International Korea-Japan Ceramics Seminar (1999)
* The Fabrication of low temperature firing glass-ceramics substrate, the 16th Korea-Japan Ceramic Seminar, 30 Nov.- 2 Dec. 1999, Okayama, Japan
* Evaluation of properties of low temperature firing substrate by glass-ceramics containing Fluorine (Journal of the Korean hybrid micro-electronics, 1996. 12) vol.3, No.2 pp27-37
* The study on thermal and dielectric properties of photo-machinable ss-ceramics II, The 2nd International Meeting of Pacific Rim Ceramic Societies, 15-17 July, 1996
* Crystallization and Water Swelling Phenomenon inLi_2O-MgO-MgF_2-SiO_2Glasses (Journal of the Korean ceramic society), 1996. 6, vol. 33, no. 6, pp 653-65
* Study on thermal and dielectric properties of photo-machinable Glass-ceramicsI, the 2ndJapan-Korea Ceramic Seminar, 11 Dec., 1995, Zukuba, Japan
* Water swelling and Dielectrical Characteristics of fluormica Glass-Ceraimics (Proceedings of the 10th Japan-Korea Seminar on Ceramics, 1993) pp102-107
* The Fabrication of low temperature firing glass-ceramics substrate, the 16th Korea-Japan Ceramic Seminar, 30 Nov.- 2 Dec. 1999, Okayama, Japan
* Evaluation of properties of low temperature firing substrate by glass-ceramics

containing Fluorine (Journal of the Korean hybrid micro-electronics, 1996. 12) vol.3, No.2 pp27-37

* The study on thermal and dielectric properties of photo-machinable Glass-eramics II, the 2nd International Meeting of Pacific Rim Ceramic Societies, 15-17 July,1996, Cairns, Australia
* Crystallization and Water Swelling Phenomenon in Li_2O-MgO-MgF_2-SiO_2 Glasses(Journal of the Korean ceramic society, 1996. 6.) vol. 33, no. 6, pp 653-65
* Study on thermal & dielectric properties of photo-machinable glass-ceramics I, the 2nd Japan-Korea Ceramic Seminar, 11 Dec., 1995, Zukuba, Japan
* Water swelling and Dielectrical Characteristics of fluormica Glass-Ceraimics (Proceedings of the 10th Japan-Korea Seminar on Ceramics, 1993) pp102-107
* Aluminium Titanate-Mullite Composites : Part I, Thermal Durability (Korean Journal of Materials Research, 1993)vol. 3, No.6 pp624-631
* The sealing characteristics of sealing glasses and Mn-Zn single crystal ferrite Korean Journal of Materials Research, 1991) vol. 1, No.4 pp221-228
* Crystallization of Solder Glasses for Ceramic Package(Korean Journal of Materials Research, 1991) vol. 1, No.4 pp206-213
* Joining of PbO-B2O3Glass with Alumina and Mn-Zn Ferrite, proceeding of the 8nd Korea-Japan Seminar on the new ceramics, vol.9, 1991

RESEARCH PROJECTS ACTIVITIES

*Fabrication of glass-ceramics using laser treatment techniques
*Anti-bacterial glass-ceramics
*Fabrication of glass-ceramics for low temperature firing substrate
*Ga_2O_3 doped fiber
*Strengthening of Li_2O-Al_2O_3-SiO_2 glass-ceramics by ion exchange
*Fiber for Infrared Optical Sensor
*Fabrication of Ultra-fine Ceramics via UV reactable Photosensitive Glass-Ceramics
*Bulk crystallization in Na_2O-CaO-MgO-Al_2O_3-SiO_2 glass ceramics
*High strengthened glass beads
*Sealing glass for ferrite head
*Development of the low thermal expansion glass-ceramics
*Electrical and Optical properties of As-Se-Ge Chalcogenide Glasses,. etc.

PUBLICATIONS

*Infrared Optical Fiber
*New glass
*Glass for the glass manufacturing beginners
*Electronic Display
*New materials
*Synthesis and functions of new glass
*Material science and engineering
*Introduction of semi-conductor
*Solar cell generation system
*Textbook for preparation of ceramics
*Textbook for preparation of glass