

## DR. CHEN KAN-NAN AND DR. YANG LUNG-JIEH HAVE OBTAINED R.O.C. PATENTS FOR THEIR INVENTIONS

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Dr. Chen Kan-nan, Professor of Dept. of Chemistry and Dean of the Office of Research and Development, as well as Dr. Yang Lung-jieh, Associate Professor of Dept. of Mechanical and Electro-Mechanical Engineering and Director of Instrument and Experiment Center, obtained R.O.C. Patents a few days ago for their inventions “Manufacturing Method of Single Pack Ambient Temperature Self-Curable Aqueous-based Polimeric Ink” and “A Piezo-resistive Pressure Sensor and its Packaging Method” respectively. There are 23 on-going applications for R.O.C. Patent from TKU teachers, including Li Ching-lieh (Dept. of Electrical Engineering), Kang Shung-wen (Dept. of Mechanical and Electro-Mechanical Engineering), Yang Shang-ming (Dept. of Mechanical and Electro-Mechanical Engineering), Wu Rome-Man (Dept. of Chemical and Material Engineering), Lin Meng-shan (Dept. of Chemistry), Gau Sue-huai (Dept. of Water Resources and Environmental Engineering), Lin I-nan (Dept. of Physics), and Chang Ping-huang (Dept. of Chinese).

The practice of researching among teachers boomed in TKU this academic year. Totally, there are 15 R.O.C. Patent Application cases, 8 U.S. Patent Application cases, and 2 P.R.C. Patent Application cases. Dr. Chen Kan-nan indicates that R.O.C. Patent can be classified into three categories: inventions, new models, and new patterns. Anyone who invents, improves the process of manufacture, or changes the shapes, embossment, and colors of the items to create new designs can apply for R.O.C. Patent. Dr. Chen said, “I set a good example with my own conduct by actively applying for patents to encourage teachers of TKU to devote themselves to researches.”

So far Dr. Chen Kan-nan has obtained 15 patents including patents of R.O.C., Japan, U.S., U.K., and Europe. He indicates that the invention of new style aqueous-based polimeric ink has the features of aqueous ink such

as good dispersing coloring, good waterproof ability, and good environmental claim, which can thoroughly solve the problems of traditional aqueous ink. The market potential of aqueous-based polymeric ink lies in the new trend of fabric dying and the color ink of LaserJet printer.

Dr. Yang Lung-jieh illustrates that his invention is a piezo-resistive pressure sensor and a novel wafer-level packaging method, which makes use of the features of polydimethylsiloxane (PDMS) such as low cost and fast manufacturing process and hence has the advantages of low packaging cost, short packaging time, and elegant sensor performance. The invention can be used in the aspects of blood pressure surveillance and tire pressure sensor. (~ Shu-chun Yen )