Editorial

Remarks on 15th Anniversary of Tokai University

School of Medicine

Tatsuro MATSUMAE

President of Tokai University

(The following is the summarized speech delivered at the celebration of the 15th anniversary of the School of Medicine, Tokai University, held on February 14, 1991)

I was deeply impressed with Dean Sasaki's inspiring speech. I would like to thank Dean Sasaki for his efforts and leadership demonstrated in organizing this medical school well. Dean Sasaki's concluding remark "living in harmony", which he has deduced from his 15-year work with this medical school, will be kept in my mind for the further development of this university. Our university is composed of numbers of faculties covering sciences, culture, languages, engineering, oceanography and medicine. I believe that the collaboration of "living in harmony", as Dean Sasaki has just referred to, is very important for us and is substantially required for promoting smooth operations of these faculties.

I myself is not an expert in the field of medicine. therefore, I would like to talk, about the image processing that has been of a very useful technique in my specialized field of metallurgical engineering. In recent years, this technique has gotten into the spotlight as a means of information analysis in the field of earth science, too. The image processing is also deemed very useable in the medical field. Why I am saying this is that this morning I saw an X-ray film, which was black and white. I thought it would be nicer if it were in color. Around fifteen years ago, I had tried to devise the color image processing on X-ray films with the assistance of engineers of a research institute of NHK (Japan Broadcasting Company). I remember, however, that we were confronted with really a lot of difficulties and problems.

As it is often said, "seeing is believing". Seeing is much more convincing than talking or writing. The image presentation of information is the most effective way of promoting better understanding. About 80% of the information we are receiving nowadays from outside is through our sight or a certain image. In this sense, great expectations are entertained of the technological development of image processing.

Let me introduce you some examples of what the image processing has done so far. The drainage of oil in the sea can be clearly recognized by the image processing technique. The pictures taken from a satellite can be prepared into clearly colored ones through the image processing. The pictures of the oil drainage in the Persian Gulf shown this morning on NHK television news were thus created by Professor Sakata and his staff of Tokai University.

The image processing can also be used in finding out what original colors look like of those paintings having grown dull in color. This technique is further applied to detect the inside of an ancient coffin, to refresh aged X-ray films, to analyze historically valuable things and so on. In the field of medical science, the image processing has been well established for looking into blood vessels and central nervous system by means of computed tomography. In earth science, pictures taken every given interval are used to reveal where, when and what changes occurred on the planet earth.

The image processing is no doubt a technique

Tatsuro MATSUMAE, Dean of Tokai University, 28-4, Tomigaya 2-chome, Shibuya-ku, Tokyo 151, Japan
2—T. MATSUMAE

of diversified uses, including even military purposes. We, academic professionals, must seek its most effective way of use in due consideration of the peace and prosperity of the general public. Toward this end, I think that all faculty members of Tokai University should work in close and mutual cooperation, as Dean Sasaki puts it as "living in harmony".

Thank you very much.