It is a great pleasure for us to present a collection of papers read at the Toyoichi Tanaka Memorial Symposium on Gels held on 10-12 September 2008 in Tokyo. Professor Toyoichi Tanaka of MIT has developed gel science after the discovery of volume phase transition, but unfortunately he passed away so early in 2000. His friends and co-workers decided to organize a symposium commemorating the 30th anniversary for the discovery of the volume phase transition in 1978.

The symposium was held in a style of Faraday Discussions. Full papers written in Japanese were sent beforehand to all the participants, and discussions were active after a short (5min) presentation of each paper. Since Japanese language is very different from European languages, we Japanese could speak freely without any hesitation. Although all the participants are good at English as proved by their publication of many papers in English, yet the discussion of delicate nuances could be done better in Japanese than in English.

After the successful symposium, papers written in English taking into account the discussions during the symposium were reviewed by expert scientists, and the papers were revised accordingly. We hope that this collection of papers is interesting and useful for all the scientists and engineers working in the area of gels both in academia and industry. Finally, we thank all the contributors and reviewers for their enthusiastic efforts.

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