



Contents

Professor Dr Edward Joseph Gübelin A tribute by E. Alan Jobbins	257	Stereoscopic effect in asterism and chatoyancy H. Killingback	312
HPHT treatment of different classes of type I brown diamonds T. Hainschwang, A. Katrusha and H. Vollstaedt	261	Identification of an imitation of pearl by FTIR, EDXRF and SEM T.L. Tan, T.S. Tay, S.K. Khairoman and Y.C. Low	316
Describing diamond beauty – assessing the optical performance of a diamond M.D. Cowing	274	X-ray luminescence, a valuable test in pearl identification H.A. Hänni, L. Kiefert and P. Giese	325
Gem-quality musgravite from Sri Lanka K. Schmetzer, L. Kiefert, H.-J. Bernhardt and M. Burford	281	The variation of RI with rotation of a doubly refractive gemstone on the refractometer hemicylinder Xinhua Song, Ruihua Wu and Weizheng Wu	331
Iron- and zinc-rich gem-quality taaffeites from Sri Lanka K. Schmetzer, L. Kiefert, H.-J. Bernhardt, M. Burford and D.P. Gunasekara	290	Use of the polarizing filter on the refractometer B.D. Sturman	341
Note on nephrite jade from Val Faller, Switzerland D. Nichol and H. Giess	299	Letter to the Editor	349
Nephrite jade from Mastabia in Val Malenco, Italy D. Nichol and H. Giess	305	Abstracts	350
		Book Reviews	357
		Proceedings of the Gemmological Association and Gem Testing Laboratory of Great Britain and Notices	360

Cover Picture: In honour of Professor Dr Edward J Gübelin – 1913-2005

Reflecting an adventurous life, this 10 mm spray of acicular tourmaline crystals protogenetically embellished with microcrystals of quartz rests for eternity encased in rock crystal, a true symbol of beauty in nature. Sample personally collected in 1987 by Edward J Gübelin and John I. Koivula at the Golconda Mine in Minas Gerais, Brazil, during a field excursion at the XXI International Gemmological Conference. Polarized light with compensator. Photomicrograph by John I. Koivula, courtesy of microWorld of Gems. (See tribute to Professor Dr Edward Gübelin, p.257)