Contents

Part I	Review of Astronomical Photography	
	of the Specialist in Astronomical Photography lin (With 2 Figures)	2
Part II	Photographic Emulsions	
	Photographic Development dell (With 13 Figures)	22
	s on Spectroscopic Emulsions – An Update Good (With 3 Figures)	28
	c Grid Processing of Large Photographic Plates moulin, J. Québatte, and R.M. West (With 3 Figures)	34
	ical Tests of FAE Processing ner (With 2 Figures)	38
Part III	Hypersensitization	
Astronomi	citization of Kodak IN Emulsions at the Rozhen National ical Observatory. By V. Tsintsarov, Ts. Georgiev, cov, B.Zh. Kovatchev, and M. Panov (With 3 Figures)	42
	Hypering at Tesca leudier, C. Labeyrie, and T. Lavergé (With 2 Figures)	47
103a-O Pl	ure Influence on Hydrogen Treatment of Kodak IIa-O and ates. By O. Zichová, J. Zicha, V.I. Tsintsarov, L.Kh. Iliev, Georgiev (With 5 Figures)	49
•	ensitivities of Hypersensitized Emulsions ti and T. Watanabe (With 4 Figures)	5 6
	ation of Hypersensitized IIIa-J Plates by Exposure to Air. By D. Engels and K.P. Schröder (With 1 Figure)	61
		VII

Part IV	Calibration and Sensitometry	
• • • • • • • • • • • • • • • • • • • •	cedures for the Characteristic Curve nann and W. Häupl (With 6 Figures)	6 4
	Problems on Schmidt Plates r (With 2 Figures)	68
New Emulsi	ons and Sensitometry. By A. Maury (With 2 Figures)	71
	dibration of Stellar Magnitudes berg (With 3 Figures)	77
	y Founded Analytical Representation of the Characteristic E. Gerth (With 2 Figures)	83
Photograph By I. Guma	ic Calibration of Sunspot Equidensitograms	91
	ptive Procedure of Brightness Evaluation from the tic Curves. By I.L. Andronov (With 2 Figures)	92
Part V	Photographic Techniques	
in Astronon	ge Masking Technique for Revealing High-Density Features nical Photographic Plates atte and B. Dumoulin (With 5 Figures)	98
Atlas Copyi	ng On-Film. By H. Zodet (With 5 Figures)	105
	on and Elimination of Plate Flaws in Copying oberton and S.B. Tritton (With 5 Figures)	116
On the Emp	ployment of Copies in Astrophotography. By E. Gerth	121
	mposition of Many Plates n (With 3 Figures)	125
	Tethod of Transferring Information on the Basis of Inner- elopment. By W. Högner (With 2 Figures)	133
By JL. He	perties of Kodak Plates Used in Astronomy udier, C. Labeyrie, T. Lavergé, P. Pariyski, G. Sirand-Rey, vot (With 4 Figures)	135
	omar Observatory Sky Survey – Photographic Procedures	140
Part VI	Measurement and Reduction	
	Measuring Machine chi and T. Soyano (With 4 Figures)	146

By M. Hiesgen (With 7 Figures)	149
The ASAG Program Package for Image Processing. By G.M. Richter	155
Photometric Accuracy of an Adaptive Filtering Technique By M. Capaccioli, H. Lorenz, and G.M. Richter (With 6 Figures)	157
Two Digital Filtering Methods and the Spiral Structure of the M31 Galaxy. By T.B. Georgiev (With 5 Figures)	162
Spectral Classification at Low Dispersion. By W.C. Seitter	169
Fast Astrometric Reduction at Tesca. By JL. Heudier	173
Astrometric Accuracy on Tautenburg Schmidt Plates By W.R. Dick, E. Schilbach, and RD. Scholz	178
Astrometry on Tautenburg Schmidt Plates for Improvement of the Astronomical Reference Frame By C. Witschas, D. Böhme, and H. Sefkow	182
Part VII Astronomical Applications	
Automated Detection of Large-Scale Structures in Space I: Reduction of Direct Schmidt-Plates. By H. Horstmann (With 5 Figures)	186
Automated Detection of Large-Scale Structures in Space II: Redshift Measurements. By P. Schücker (With 2 Figures)	192
Automated Detection of Large-Scale Structures in Space III: A Search for Quasars By V. Gericke, P. Schücker, and W.C. Seitter (With 2 Figures)	198
Stellar Photometry with Schmidt Plates By V. Mohan and M. Crézé (With 7 Figures)	201
The Accuracy of Photographic Photometry of Stars By O.D. Dokuchaeva	209
A Deep High Resolution Wide Field Survey of the Milky Way By C. Madsen (With 1 Figure)	210
Some Results of the Faint Asteroid Search in Tautenburg By F. Börngen (With 2 Figures)	217
The Plate Collection of Sonneberg Observatory By W. Götz (With 1 Figure)	223
Project for the Photometry of Clusters of Galaxies By F.W. Baier and R. Ziener (With 1 Figure)	226
The Discovery of a Proto-Spiral Galaxy By D. Malin, G.D. Bothun, and C.D. Impey (With 3 Figures)	230

Recent Photographic Work with the U.K. Schmidt Telescope	
By C.M. Humphries and D.H. Morgan	234
Present Status of the Kiso Observatory. By K. Ishida	239
Index of Contributors	241