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Contents

vii	<i>Conference Committee</i>
ix	<i>Introduction</i>

SESSION 1

1	Precision finishing with magnetorheological (MR) jet technology [TD03-01] W. Kordonski, A. Shorey, M. Tricard, QED Technologies (USA)
4	Free form surfaces: a challenge in optical manufacturing [TD03-02] U. Birnbaum, O. Falkenstörfer, Th. Herrmann, J. Röder, R. Schreiner, T. Waak, JENOPTIK Laser, Optik, Systeme GmbH (Germany)
9	HyDra: A novel hydrodynamic polishing tool for high quality optical surfaces [TD03-03] E. Sohn, E. Ruiz, E. Luna, L. Salas, M. Núñez, J. Valdés, B. Martínez, I. Cruz-González, Univ. Nacional Autónoma de Mexico (Mexico)
12	Automatically high precision manufacturing technology for micro-optic subgroups [TD03-04] T. Sure, Leica Microsystems GmbH (Germany); V. Guyenot, Fraunhofer-Institut für Angewandte Optik und Feinmechanik IOF (Germany); M. Gerhardt, OptoTech (Germany)
16	Precision cylinder optics for higher requirements [TD03-06] D. Bergner, O. Falkenstörfer, D. Malina, J. Röder, R. Schreiner, JENOPTIK Laser, Optik, Systeme GmbH (Germany)
20	Research on fabrication of aspheres at the Center of Optics Technology (University of Applied Science in Aalen) [TD03-07] R. Boerref, J. Burger, A. Bich, C. Gall, T. Hellmuth, Univ. of Applied Science Aalen (Germany)
24	Fabrication of blanks, figuring, polishing and testing of segmented astronomic mirrors for SALT and LAMOST projects [TD03-08] A. P. Semenov, M. A. Abdulkadyrov, A. N. Ignatov, V. E. Patrikeev, V. V. Pridnya, A. V. Polyanchikov, Y. A. Sharov, JSC Lytkarino Optical Glass Plant (Russia)
28	Optical manufacturing with magneto-rheological finishing (MRF) [TD03-09] M. DeMarco, QED Technologies Inc. (USA)
31	Applying 5S lean tools to optical fabrication [TD03-10] G. J. Arserio, R. A. Nasca, Corning Tropol Corp. (USA)
35	UltraForm finishing [TD03-11] E. Fess, J. Schoen, Univ. of Rochester (USA); M. Bechtold, D. Mohring, OptiPro Systems (USA)
38	Conditioning method development for 3M Trizact diamond tile fixed abrasives used in the finishing of brittle substrates [TD03-52] T. Fletcher, F. T. Gobena, V. Romero, B. Sventek, 3M Co. (USA); W. Schoenhofen, 3M Co. (Germany)

SESSION 2

- 41 **Glass molding technology** [TD03-12]
H. Murakoshi, Toshiba Machine Co., Ltd. (Japan)
- 44 **Grinding technoloy of aspheric molds for glass-molding** [TD03-13]
Y. Kojima, Toshiba Machine Co., Ltd. (Japan)
- 47 **A comparison of force and acoustic emission sensors in monitoring precision cylindrical grinding** [TD03-14]
E. R. Marsh, J. A. Couey, The Pennsylvania State Univ. (USA); B. R. Knapp, Olympic Precision (USA); R. R. Vallance, George Washington Univ. (USA)

SESSION 3

- 50 **Development of a new process for manufacturing precision gobs out of new developed low Tg optical glasses for precise pressing of aspherical lenses** [TD03-15]
R. Jaschek, C. Klein, C. Schenk, K. Schneider, J. Freund, S. Ritter, SCHOTT AG (Germany)
- 53 **Optical materials micromechanical property database: fracture toughness and ductility** [TD03-17]
S. Shafir, J. J. Randi, J. C. Lambropoulos, Ctr. for Optics Manufacturing/Univ. of Rochester (USA)
- 61 **Ultraprecision finishing of micro-aspherical surface by ultrasonic assisted polishing** [TD03-53]
H. Suzuki, R. Kawamori, Y. Yamamoto, Kobe Univ. (Japan); M. Miyabara, Toyohashi Univ. of Technology (Japan); T. Okino, Y. Hijikata, T. Moriwaki, Kobe Univ. (Japan)

SESSION 4

- 64 **Where do optical tolerances come from?** [TD03-18]
J. L. Bentley, Corning Tropol Corp. (USA) and The Institute of Optics/Univ. of Rochester (USA)
- 67 **CAD integration: opening up new optical design possibilities** [TD03-20]
J.-B. Haumonte, J.-C. Venturino, Optis (France)
- 70 **Designing and specifying aspheres for manufacturability** [TD03-21]
J. Kumler, Coastal Optical Systems Inc. (USA)
- 73 **Measurement of mild aspheric surfaces with subaperture stitching interferometry** [TD03-22]
P. E. Murphy, G. Forbes, J. Fleig, QED Technologies (USA)
- 76 **Correcting transmitted wavefronts using magnetorheological finishing (MRF)** [TD03-23]
C. Hall, S. O'Donohue, P. Dumas, QED Technologies (USA)
- 79 **MTF testing of imaging systems: A practical solution for production environments** [TD03-24]
S. P. Sadoulet, Edmund Optics, Inc. (USA)

- 82 **The ultrahigh precision form measurement of small, steep-sided aspheric moulds, incorporating novel hardware and software developments** [TD03-25]
M. W. Mills, M. J. Hutchinson, Taylor Hobson Ltd. (United Kingdom)
- 86 **Tactile sensor for aspheric measurements** [TD03-26]
R. Schoene, Univ. of Passau (Germany); J. Zaenkert, LINOS Photonics GmbH & Co. KG (Germany); T. Hanning, Univ. of Passau (Germany)

POSTER SESSION: OPTICAL MANUFACTURING

- 90 **A novel polishing head with a gimbals-like structure for the high-speed polishing process** [TD03-27]
H. Lee, N. Lee, Hanbat National Univ. (South Korea); C. Song, H. Lee, Y. Shin, C. Park, Korea Institute of Machinery and Materials (South Korea)
- 93 **Design and fabrication of microlens array for VCSEL to fiber coupling** [TD03-30]
S. Kim, H. Kim, J. Lim, J. Han, S. Kang, Yonsei Univ. (South Korea)
- 97 **Several technical problems of high power He-Ne laser with flat discharge tube** [TD03-31]
Y. Ling, Southeast Univ. (China)
- 100 **Prediction of the removal profile for tools having a finite contact patch** [TD03-34]
C. Bouvier, S. M. Gracewski, Univ. of Rochester (USA) and Ctr. for Optics Manufacturing (USA); E. Fess, Univ. of Rochester (USA); S. J. Burns, Univ. of Rochester (USA) and Ctr. for Optics Manufacturing (USA)
- 104 **Fabrication of affordable aspheric mirrors by electroforming** [TD03-35]
B. Stein, NiCoForm, Inc. (USA); A. Caneer, Advanced Optical Systems, Inc. (USA)
- 106 **GRANTECAN telescope M3 mirror manufacturing** [TD03-36]
M. A. Abdulkadyrov, A. N. Ignatov, V. E. Patrikeev, V. V. Pridnya, A. V. Polyanchikov, A. P. Semenov, Y. A. Sharov, JSC Lytkarino Optical Glass Plant (Russia)
- 110 **M1 and M2 mirrors manufacturing for VISTA telescope** [TD03-37]
M. A. Abdulkadyrov, A. N. Ignatov, V. E. Patrikeev, V. V. Pridnya, A. V. Polyanchikov, A. P. Semenov, Y. A. Sharov, JSC Lytkarino Optical Glass Plant (Russia); E. Atad-Ettedgui, I. Egan, R. J. Bennet, S. Craig, UK Astronomy Technology Ctr. (United Kingdom)
- 114 **Development of compliant tools and processes to polish axisymmetric surfaces** [TD03-39]
C. Bouvier, S. M. Gracewski, Univ. of Rochester (USA) and Ctr. for Optics Manufacturing (USA); E. Fess, Univ. of Rochester (USA); S. J. Burns, Univ. of Rochester (USA) and Ctr. for Optics Manufacturing (USA)
- 118 **Double-sided lapping and polishing of optical materials** [TD03-40]
M. Naselaris, Sydor Optics, Inc. (USA)

POSTER SESSION: SURFACE CHARACTERIZATION, CHEMISTRY, AND MATERIAL SCIENCE

- 121 **Comparative micro-indentation and dislocation activity in silicon and CaF₂: a model** [TD03-41]
Q. Zhang, J. C. Lambropoulos, Ctr. for Optics Manufacturing/Univ. of Rochester (USA)
- 125 **Use of nanocrystalline ceria in EUV lithography optics polishing** [TD03-42]
P. G. Murray, Nanophase Technologies Corp. (USA); T. Böhm, H. Maltor, Carl Zeiss SMT AG (Germany)
- 129 **Effects of glass mechanical properties on polishing** [TD03-43]
S. N. Shafir, J. C. Lambropoulos, Ctr. for Optics Manufacturing/Univ. of Rochester (USA)

POSTER SESSION: OPTICAL METROLOGY AND TESTING

- 134 **Power spectral density plots inside MRF spots made with a polishing abrasive-free MR fluid** [TD03-45]
J. E. DeGroot, The Institute of Optics/Univ. of Rochester (USA) and Univ. of Rochester (USA); A. E. Marino, Univ. of Rochester (USA); K. E. Spencer, S. D. Jacobs, The Institute of Optics/Univ. of Rochester (USA) and Univ. of Rochester (USA)
- 139 **Phase retrieval as an optical metrology tool** [TD03-46]
G. R. Brady, J. R. Fienup, The Institute of Optics/Univ. of Rochester (USA)
- 142 **Imaging of biological tissues with optical coherence tomography system using Jones-Mueller calculus** [TD03-47]
S. Firdous, M. Ikram, Pakistan Institute of Engineering and Applied Sciences (Pakistan)
- 149 **Mechanical errors related to interferometric radius of curvature measurements** [TD03-48]
P. J. McGhee, Univ. of Rochester (USA) and Fisba Optik LLC (USA); J. Nemecek, Fisba Optik LLC (USA)
- 153 **The sum of all errors** [TD03-50]
B. Light, Optimax Systems (USA)
- 156 **Calibrating interferometric imaging distortion using subaperture stitching interferometry** [TD03-51]
S. O'Donohue, P. Murphy, G. Forbes, J. Fleig, P. Dumas, QED Technologies (USA)
- 159 *Author Index*

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Introduction

This conference is the joint effort of SPIE—The International Society for Optical Engineering and APOMA—The American Precision Optics Manufacturers Association to host a forum and venue for worldwide experts and practitioners to gather, share knowledge, and discuss the future of optical fabrication.

The first Optifab conference was successfully held in May 2003 in Rochester, NY, where exhibitors from Europe, the United States, and Japan showcased machinery and equipment for the optical fabrication community and provided the unique opportunity to observe “on-the-shop-floor” demonstrations. Optifab was purposely chosen to alternate with the semi-annual Optatec exhibition in Frankfurt, Germany to provide an optical manufacturing fabrication experience in North America. Responses from our industry colleagues, as well as those from universities who carry out research in optics manufacturing science, have been overwhelmingly positive.

The technical venue of Optifab 2005 continues to leverage the international participation and expertise in the fabrication, processes, materials and metrology areas. The topics for the digest include a diverse range of new and emerging fabrication related technologies across the globe. Authors were asked to concentrate on novel and revolutionary processes, applications, and commercialization of technology rather than research fundamentals. Overall, we believe you will find the technical digest to be a great value and allow you to see first-hand the efforts of the leading international scientists, engineers, and manufacturers in manufacturing methods.

You will find topics to include MRF, glass molding, electroforming, microlenses, and many more advanced technologies. Technologies including telescope optics, free form surfaces, aspheric manufacturing, and other emerging technologies will be presented. Material and surface characterization and chemistry are well covered, as are metrology and testing. Optifab clearly represents a comprehensive state-of-the-art conference where the very latest in a wide variety of methods in optical manufacturing will be presented and discussed.

We express our sincere thanks to all those who worked directly or indirectly to create the program and attract the attendees for a successful conference.

Robert E. Fischer
Masahide Katsuki
Matthias Pfaff
Kathleen A. Richardson

