



STAFF

Editor – Lisa Weise
Design & Layout – Keith Bretzius

REVIEWERS

Lori Buwalda (Holt High School)
Annis Hapkiewicz (Okemos High School)
James McDonald (Central Michigan University)
Danielle Tandoc (Okemos High School)
Mike Van Antwerp (Holt High School)

ARTICLE SUBMISSION

Articles for publication in the MSTJ Journal are invited on a contribution basis and are subject to editorial review. Please submit two (2) printed copies of the manuscript as well as the manuscript on disk (PC format preferred). Every attempt will be made to publish within a year after approval for publication. Send manuscripts to:

Lisa Weise, MSTJ Journal Editor
6070 Valley Trail
Dimondale, MI 48821
Phone: (517) 694-2162
E-mail: lweise@hpsk12.net

Other publications are hereby granted permission to reproduce articles from the MSTJ Journal provided the publication and author are properly credited and a copy of the publication is forwarded to the Association for its records. Copyrighted articles are noted, and permission to use them should be requested directly from the authors.

The MSTJ Journal is published two times per year and sent to approximately 1600 MSTJ members. Inquires should be sent to MSTJ Office, 3300 Washtenaw Avenue, Suite 220, Ann Arbor, MI 48104-4294. Phone (734) 973-0433. Fax (734) 677-3287. Membership information is available on our website: <http://www.msta-mich.org>

Experiments, laboratory activities, demonstrations, and other descriptions of the use of chemicals, apparatus, and instruments are illustrative and directed at qualified teachers. Teachers planning to use materials from MSTJ Journal should consider procedures for laboratory and classroom safety to meet their local needs and situation. MSTJ Journal cannot assume responsibility for uses made of its published material.

MSTA BOARD MEMBERS

Executive Director - *Robby Cramer*
President - *Mike Klein*
Past President - *Betty Crowder*
2011 Conference Chair - *Paul Drummond*
2011 Assistant Conference Chair - *Michael Sampson*
Secretary - *Vacant*
Treasurer - *Greg Johnson*
Parliamentarian - *Marlenn Maicki*
Directors At Large - *Conni Crittenden, June Teisan, Kathy Mirakovits*
Director of Underrepresented Groups - *Deborah Peek-Brown*
Director Higher Education - *Stephen Burton*
Director Curriculum - *Rochelle Rubin*
Director Elementary - *Charles Bucinski*
Director Middle Level - *Yoneé Kuiphoff*
Director High School - *Michael Sampson*
Journal Editor - *Lisa Weise*
Newsletter Editor - *Cheryl Hach*
Historian - *Monica Hartman*
Awards - *Marlene Maicki*
Membership - *Paul Drummond*
Technology - *Mike Klein*
Special Education - *Sally DeRoo*
Evolution Committee - *Greg Forbes*
Science Matters Network - *David Bydlowski*

Regional Directors

Region 1 - *Cheryl Hach*
Region 2 - *Mel Drumm*
Region 3 - *Isaac Cottrell*
Region 4 - *Michele Svoboda*
Region 5 - *Christel Marschall*
Region 6 - *Karen Kelly*
Region 7 - *Pete Peterson*
Region 8 - *David McCloy*
Region 9 - *Monica Hartman*
Region 10 - *Thomas Waclawski*
Region 11 - *Vacant*
Region 12 - *Vacant*
Region 13 - *Carolyn Lowe*
Region 14 - *Lynn Thomas*

State Organization Representatives

MABT - *Cheryl Hach*
MAEOE - *Maura Jung*
MCCB - *LuAnne Clark*
MCTA - *Jamie Benigna*
MDE - *Kevin Richard*
MDSTA - *Judy Morlan*
MEA - *Christel Marschall*
MESTA - *Timothy Neason*
MIAAPT - *Alex Azima*
MSELA - *Marienn Maicki*
MSO - *Vacant*
NSTA - *LaMoine Motz and Dwight Sieggreen*
SCST - *Vacant*
OEAA - *Rochelle Rubin*