"LEARNING TO THINK"

For nearly a half century, the Science and Engineering Fair of Metropolitan Detroit, Inc. (SEFMD) has provided tens of thousands of young people an incentive to plan, prepare, and present science and engineering projects. The Fair process is lauded by educators as an important "learning to think" experience for the 25,000 to 30,000 seventh through twelfth grade students from Wayne, Oakland, and Macomb counties who participate in inner-school competitions each year. Over 3,000 of these then enter the regional fair, with 2,000+ chosen to bring their projects to the Metro Fair at Cobo Center, where fairs centering on the physical and life sciences in 13 different categories (e.g. chemistry, physics, biology, environmental science, engineering,...) are held under one roof. Over the years, 452 students have won Grand Awards, enabling them to go to the International Science and Engineering Fair, where southeast Michigan students have distinguished themselves with major awards among their peers from 48 states and 46 nations. Numerous Fair participants have pursued careers in science and engineering and gone on to distinguish themselves in their fields.

A secondary and equally important benefit of the fairs is the increased interest of students in the Detroit Public Schools in science and engineering. This welcome renewal is strengthened by a strong commitment from Detroit Public Schools, Detroit Public Schools Foundation, and DAPCEP (Detroit Area Pre-College Engineering Program) to the fairs. Organizers and educators were thrilled to see more than 79% of the entries in 2012 coming from Detroit Public Schools.

The SEFMD should be a source of great pride for the entire tri-county area – as it is for those who staff it and those who fund it. It has long been one of the largest such fairs in the country and, judging by the results, one of the best.

HOW IT BEGAN

The Special Activities Committee of the Engineering Society of Detroit proposed to the ESD Board of Directors in September 1956 that the society sponsor a

Metro Science Fair to encourage and support education and the future of the related professions, in conjunction with the Detroit Board of Education and the Detroit Science Teachers Clubs. The Board gave approval, the cooperation of The Detroit News was obtained, and the first Fair was held in 1958. There were 2,550 entries which produced 1,097 exhibits in the fair held at the State Fair Grounds. A fund drive netted \$46,000, the fair cost \$35,000, and attendance was estimated at 45,000 people. To quote a report to the ESD Board, it was a "smashing" success. The Board agreed to continue sponsorship.

INCORPORATION

The Fair operated under the direct auspices of ESD until 1962 when it became evident it should become a separate entity to assure non-profit status for tax purposes. The Metro Detroit Science Fair, Inc. was incorporated on October 23, 1962 to "stimulate an active interest among young people in the several fields of scientific study and to give recognition to talented science students." The name remained until 1970 when it was changed to The Science and Engineering Fair of Metropolitan Detroit, Inc., to indicate more accurately its scope. ESD and The Detroit News continued to cooperate in sponsorship of the Fairs through 2001. In September of 2001, the inauguration of the renovated and expanded Detroit Science Center and a refocus of the engineering society on other programs resulted in a new home at the spectacular museum and an independent stature for the Fairs. The Detroit Science Center and the Detroit News continued support of the Fair until 2003.

STAFFING

The SEFMD is:

- governed by a Board of Directors (made up of representatives from top corporations and educational institutions)
- operated by an Operating Council
- judged by over 520 volunteers who are experts in their fields
- funded with monies raised by an Executive Council

The Executive Director serves as liaison between Board and Councils and oversees day-to-day operations. The Corporate Administrative Secretary is a part time paid position. All other functions are staffed by the nearly 700 volunteers who participate each year.

OTHER ACTIVITIES

In 1995, SEFMD launched the first annual Michigan Science Fair. The top forty to fifty students from the tri-county area compete with a similar number of students from other regional fairs throughout the state for additional recognition and awards. In May 2000 the preeminence of Detroit's Fair was recognized when the City was chosen to host the International Science and Engineering Fair. Over 1,100 students and 1,500 teachers and mentors from 46 countries were in Detroit for the weeklong event. In excess of 1,000 judges (mostly PhD or equivalent) were used to jury the entries and over two million dollars in awards and scholarships were distributed to the top winners of this prestigious competition.. This event showcased Detroit and portrayed SEFMD to the global community as a worldclass organization.

In the 2015-2016 School year, in order to keep pace with changing technology, numerous new categories were added such as Robotics & Intelligent Machines, Embedded Systems, Systems Software

FUNDING

Funding for the Fair is provided by corporations, industries, utilities, technical societies, health and medical groups, financial institutions and individual contributions. SEFMD is recognized by the IRS as a non-profit 501 (c)(3) organization and is licensed to Solicit Charitable Contributions from the State of Michigan – MICS 5290.

To date, SEFMD has a restricted endowment to ensure the long-term financial stability of the fair. The dividends and interest from this endowment provide an annual income of \$40,000 (at 5% interest) to support the annual \$156,000 operating budget. The balance is made up of individual, corporate, and foundation support.

THE 2015-2016 FAIR

Mar 8-12, 2016 – Cobo Detroit Area, tri-county Project setup Tuesday, 3/8/2016 Judging Wed, 3/9/2016 Public Viewing

Thur-Fri, 3/110-11/2016

Sat. 3/12/2016 Tear down

Michigan Science Fair to be determined

International Fair May 8-13, 2016 Phoenix, AZ

Senior Division Grand Award winners will receive trips to the International Science and Engineering Fair (ISEF) in Phoenix, AZ where their projects will be further evaluated allowing their creators an opportunity to compete for numerous additional awards, scholarships and further recognition. Up to six individual awardees, plus a three-person team project, and two winners of the Michigan Science Fair will represent metro Detroit and the State of Michigan in the International Fair.

Each Grand Award Winner will be given preferential status on receiving a four-year paid merit scholarship from one of the following universities: Lawrence Technological University, Oakland University, , and University of Detroit Mercy. The scholarship and amounts are subject to the rules of the individual universities.

The Grand Award winners also compete for the Detroit Science Award, an all-expense paid study trip to the Weizmann Institute in Rehovat, Israel.

The 2016 Fund Drive has a goal of \$156,000

Gifts are Tax Deductible- IRS 501 c(3) & MICS 5290 Checks may be made payable to: Science Fair - SEFMD P.O. Box 158 – Farmington, MI 48332-0158

SEFMD BOARD OF DIRECTORS

President: Ed Sellers

Thomas Madison, Inc.

Vice-President: Dave Baxter

Tovota North Americas

Secretary Tom MacFarlane

Clark Hills, PLC

Treasurer and Tim Fino

Fair Director Mini/Micro Computer Applications

Doug Allen Global Bridges International The Chrysler Foundation Brian Glowiak

Marilyn Graham MidTown Detroit DTE Energy Berry Marietta

Alycia Meriweather Detroit Public Schools Jim Meloche The Marketing Collaborative

Kathy Kitzmann Mercy High School **Detroit Edison** Don Bramlett

Wayne State University David Pieper **Brad Simmons** Ford Motor Company Don Smolenski Evonic Oil Additives

SEFMD OFFICIAL ADDRESS

SEFMD. Inc P.O. Box 158 Farmington, MI 48332-0158 (248) 471-9900 fax: (248) 479-0383

email: SF2016@SEFMD.org web site: http://www.sefmd.org



Facts about the 59th Science and **Engineering Fair** of Metropolitan Detroit, Inc. (SEFMD)



2015-2016

(Rev 1, 9/9/2016, blue)