# EXHIBIT 1 GEORGIA TECH RESEARCH CORPORATION

## ARTICLE I MISSION AND ORGANIZATION

- 1.1 Mission. The CENTER FOR THE IDEAS: MATERIALS, DESIGN, DEVELOPMENT AND DEPLOYMENT (hereinafter "IDEAS:MD3") was established to promote and conduct research, development, and testing in materials data science and informatics that will lead to new and improved methods to accelerate materials design, development, and deployment (MD3) and to disseminate information and knowledge regarding these capabilities through research projects, conferences, workshops and publications. IDEAS:MD3 will conduct research focused on methods and approaches for materials data science and informatics and invites interested organizations to become members (hereinafter "MEMBER" or "MEMBERS") and participate in the research activities conducted therein.
- **1.2 Organization**. The Director shall lead the IDEAS:MD3 with the assistance of the MEMBERS through a Member Advisory Board ("MAB") for the purpose of advising on the research directions and operational policies of the IDEAS:MD3 as further defined by Articles III and IV. Upon consideration by the MAB, the final selection of research projects to be performed and the manner in which such projects shall be performed and how the IDEAS:MD3 shall be operated shall be made by the Director of the IDEAS:MD3.

## ARTICLE II DEFINITIONS

- 2.1 "MEMBER" means entities, either public or private, which support and/or fund RESEARCH PROJECT(S) as defined in the IDEAS:MD3 MEMBERSHIP AGREEMENT.
- 2.2 "STAFF MEMBER" shall mean employees and graduate student employees of the Georgia Institute of Technology (hereinafter "GIT"), a unit of the University System of Georgia, who shall perform the RESEARCH PROJECT(S).
- 2.3 "RESEARCH PROJECT(S)" shall mean the research and development projects, tasks or program(s) which will be performed by IDEAS:MD3, and/or IDEAS:MD3 MEMBERS. RESEARCH PROJECTS are set forth in the IDEAS:MD3 MEMBERSHIP AGREEMENT.
- **2.4** "MEMBER ADVISORY BOARD" (hereinafter "MAB") shall mean a committee consisting of the representatives of each of the MEMBERS that are a Full Voting Member, as defined in the IDEAS:MD3 MEMBERSHIP AGREEMENT, and representatives of GTRC.

- 2.5 "IDEAS:MD3 MEMBERSHIP AGREEMENT" means an agreement between the Georgia Tech Research Corporation, a Georgia nonprofit corporation and supporting organization of GIT, having a business address at Research Administration Building, 505 Tenth Street, Atlanta, Georgia 30332-0420 ("GTRC") and a MEMBER.
- 2.6 "INTELLECTUAL PROPERTY" means any intellectual property, including, without limitation, any inventions, improvements and discoveries, including all computer software, works, material and data, whether or not protectable by patent, trade secret or copyright which is created or conceived in the course of performance of the RESEARCH PROJECT(S) which are MEMBER-fees funded.
- 2.7 "BACKGROUND INTELLECTUAL PROPERTY" means any written and/or oral technical information, patent applications, patents, utility models and other intellectual property rights with regard to the RESEARCH PROJECT(S) or other efforts owned by MEMBER and/or GTRC, but not resulting from performing the respective RESEARCH PROJECT(S), to the extent owned or controlled by a MEMBER and/or GTRC.
- 2.8 "RESEARCH RESULTS" means any and all results, whether patentable or not, in written or oral form, achieved by performing the research and/or development work under the respective RESEARCH PROJECT(S) funded by MEMBER fees.
- 2.9 "SUBSIDIARY" shall mean any company in which MEMBER owns more than 51% (fifty per cent) of such company's voting capital.
- 2.10 "MEMBER INTELLECTUAL PROPERTY" means individually and collectively all INTELLECTUAL PROPERTY which is created or conceived solely by employees or personnel of MEMBER in the course of performance of work under the IDEAS:MD3 membership.
- 2.11 "GTRC INTELLECTUAL PROPERTY" means individually and collectively all INTELLECTUAL PROPERTY and RESEACH RESULTS which is created or conceived by STAFF MEMBER of GTRC in the course of performance of work in support of GTRC, GIT or the IDEAS:MD3 RESEARCH PROJECT(S).
- 2.12 "JOINT INTELLECTUAL PROPERTY" means individually and collectively all INTELLECTUAL PROPERTY which is created or conceived jointly by STAFF MEMBER and employees or personnel of MEMBER in the course of performance of work in support of GTRC, GIT or the IDEAS:MD3 RESEARCH PROJECT(S).

## ARTICLE III MEMBERSHIP

- **3.1 Eligibility and Admission of MEMBERS.** An organization may become MEMBER of the IDEAS:MD3 upon being nominated by the IDEAS:MD3 Director, Faculty, Staff or other Member, and fulfillment of applicable membership obligations including the IDEAS:MD3 Membership Agreement and compliance with these Bylaws.
  - **3.1.1** Requests for membership by non-U.S. entities shall be reviewed and vetted by Georgia Institute of Technology's Office of Research Integrity Assurance.
  - 3.1.2 Notwithstanding anything to the contrary contained herein, all membership benefits are explicitly conditioned on full and timely compliance with all applicable U.S. Export Laws and Regulations.

- 3.1.3 All MEMBERS may, at their option, enter into separate agreements with GTRC for specific MEMBER-directed sponsored research projects. The intellectual property from the performance of research anticipated by these separate agreements with GTRC shall be governed by the terms as set forth in the separate research agreements.
- **3.2 Membership**. Membership in IDEAS:MD3 is offered to companies, governmental agencies, and non-profit or academic organizations on several different levels, each with specific rights, privileges, cost structures and durations. These are identified and selected via the IDEAS:MD3 MEMBERSHIP AGREEEMENT.
  - **3.2.1** Duration for MEMBERS will be for a period as defined in the IDEAS:MD3 MEMBERSHIP AGREEMENT.
  - 3.2.2 Membership entry or renewal into IDEAS:MD3 will be on \_\_\_\_\_ of each calendar year. MEMBER seeking to join or renew at any other time of the year shall pay prorated membership fees for the additional months as applicable in accordance with Section 3.0 of the Membership Agreement.
- **3.3 Fees.** Fees shall be apportioned for the support of research and research-related programs of IDEAS:MD3. The Director of IDEAS:MD3 shall be empowered to use membership fees as deemed effective for RESEARCH PROJECT(S), exploratory research, equipment, administration and other IDEAS:MD3 activities.
  - **3.3.1** Membership fees shall be invoiced as defined in the IDEAS:MD3 MEMBERSHIP AGREEMENT, and paid within thirty (30) days of invoice date.
  - **3.3.2** Membership shall be effective upon payment of fees and execution of the IDEAS:MD3 MEMBERSHIP AGREEMENT. Special payment terms may be allowed with the approval of the Director and GTRC.
- **3.4 Membership Benefits.** All MEMBERS shall receive the benefits as outlined in Section 9.0 of the MEMBERSHIP AGREEMENT based on the appropriate membership level.

## ARTICLE IV MEMBER ADVISORY BOARD

- **4.1 Composition of MAB Board**. The MAB shall be established and shall be comprised of one representative from each FULL VOTING MEMBER as defined by the membership levels in the IDEAS:MD3 MEMBERSHIP AGREEMENT. One representative from each REGULAR MEMBER may also attend, but not vote at, MAB meetings. A Chair shall be elected by majority vote of the FULL VOTING MEMBER representatives to lead the MAB.
- **4.2 Purpose of the MAB**. The MAB shall advise IDEAS:MD3 on the research project significance, the allocation of resources to most effectively pursue the mission of IDEAS:MD3, and the operational policies of IDEAS:MD3. The MAB may create subcommittees as it deems necessary.
- **4.3 Meetings of the MAB**. The MAB shall meet at least two times in each calendar year, at least once per year face-to-face in conjunction with the Annual Meeting of IDEAS:MD3.

Notice of the time and place of the regular meetings shall be communicated to each MEMBER at a reasonable time before each meeting.

**4.4 Voting Rights**. At all meetings of the MAB, the then-present FULL VOTING MEMBERS shall constitute a quorum for the transaction of business. Any action or resolution that is opposed by a majority of the then-present FULL VOTING MEMBERS shall not be deemed as accepted by the MAB. Voting rights of each MEMBER are defined in the IDEAS:MD3 MEMBERSHIP AGREEMENT.

## ARTICLE V INTELLECTUAL PROPERTY

- 5.1 Intellectual Property Rights. IDEAS:MD3 intends for all Intellectual Property to be released under an open source license promoted by the Open Source Initiative. The Director of IDEAS:MD3, in consultation with GTRC, shall determine which Open Source Initiative license shall be utilized for Intellectual Property on a case-by-case basis. MEMBERS may elect to fund research projects that generate proprietary research results through a separate research agreement, to be negotiated between GTRC and the MEMBER. Nothing contained herein shall be construed as effecting the parties' ownership and rights in background intellectual property, nor as requiring that background intellectual property be released as open source.
- **5.2 Compliance with Bayh-Dole Act**. MEMBER acknowledges and agrees that GTRC shall grant the U.S. Government a non-exclusive, nontransferable, paid-up, worldwide license to practice or to have practiced any CENTER INTELLECTUAL PROPERTY developed or resulting from federally funded research.

#### ARTICLE VI PUBLICATIONS

**6.1 Publication Rights.** GTRC reserves the right to publish the results of IDEAS:MD3 MEMBER-fees funded research in scientific journals, conferences and proceedings, and GIT Library.

## ARTICLE VII GENERAL

- **7.1 Notices.** Under the provisions of these BYLAWS whenever notice is required to be given, such notice may be submitted in person, by telephone, e-mail, telecopy, or by mail or private courier, to MEMBER and GTRC in accordance to Section 16.0 of the Membership Agreement. Written notice shall be deemed to be submitted at the time when the same shall be delivered, received or properly mailed
- **7.2 No Effect on Non-Profit Status**. GTRC intends that these BYLAWS comply with the requirements of Section 5.03 of IRS Revenue Procedure 97-14 (and interpretations thereof)

dealing with cooperative research agreements and shall be interpreted in a manner consistent with such requirements. GTRC reserves the right to amend these BYLAWS to the extent necessary to ensure GTRC's continued tax-exempt status or continued compliance with tax covenants made by GTRC in connection with the issuance of tax-exempt bonds, or to comply with other laws or regulations.

- **7.3 Amendments**. IDEAS:MD3 may propose amendments to these BYLAWS and/or such additional bylaws as it may deem necessary, which, upon written approval of GTRC, shall govern the operation of IDEAS:MD3.
- **7.4 Membership Agreement.** All MEMBERS are bound by the terms of these BYLAWS, via execution of the IDEAS:MD3 MEMBERSHIP AGREEMENT which incorporates these BYLAWS by reference.