MICHIGAN STATE
UNIVERSITY

Attachment 1.a

September 7, 2010

MEMORANDUM

To: Trustee Policy Committee

From: Kim A. Wilcox, Provost

Re: Approval of Contract Terms: *InPore Technologies, Inc.*

Recommendation:

BE IT RESOLVED that the Trustee Policy Committee recommends to the Board of Trustees that it approve the execution of a restated and amended license agreement with *InPore Technologies, Inc.*, consistent with earlier public notice given at a Board meeting and with the "License Amendment Term Sheet" now presented to the Board for inclusion in its minutes.

Background:

In compliance with State law, public notice of the University's intent to negotiate contracts with *InPore Technologies, Inc.* (formerly *Claytec, Inc.*), a Michigan corporation based in East Lansing, was given at the Board of Trustees' meeting on April 30, 2005. The Board approved the terms of a license agreement at its meeting on June 19, 2009. (Attachment B.) The terms of a restated and amended license agreement are now being presented for approval. (Attachment A.)

Dr. Thomas J. Pinnavaia, a Professor in the Department of Chemistry, and his immediate family own or have an option to buy an equity interest of more than 1% of the company. Dr. Pinnavaia is also an officer of *InPore Technologies, Inc.*

The attached "License Amendment Term Sheet" summarizes the agreement that MSU has negotiated with *InPore Technologies, Inc.*

Cc: Trustee Finance Committee
President Lou Anna K. Simon
Vice President Fred Poston
Vice President J. Ian Gray
Vice President Robert A. Noto
Secretary Bill Beekman
Dr. Terry May
Deputy General Counsel Kristine Zayko
Assistant General Counsel Lee Bollinger

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Attachment A

LICENSE AMENDMENT TERM SHEET

Party: InPore Technologies, Inc. (formerly Claytec, Inc.)

License: Restated and Amended Exclusive License for commercial purposes

Term: Ending at the expiration of the last to expire Patent.

Technology: U.S. Patent Numbers: 5,712,402; 5,785,946; 5,800,800; 5,855,864; 6,162,414; 6,193,943; 6,410,473; 6,413,902 (MSU TEC1994-0069); 5,622,684; 5,795,559; 5,726,113; 5,800,799; 6,649,083; 6,465,387; 6,946,109; 7,132,165; 6,800,266; 6,506,485; 6,641,657; 6,607,705; 6,585,952; 6,746,659; 6,702,993; 6,770,258; 6,706,169; 6,869,906; 7,128,892; 6,843,977; 6,713,643; 7,067,687; 7,166,265; 7,485,282; 7,449,164; 7,714,156; and U.S. Patent Application Numbers: 11/799,159; 12/520,960; and European Union Patent Application No. 8724423.2; Korean Patent Application No. 10-2009-7016387; and Japan Patent Application No. 2009-544944.

Technology's Potential Commercial Utilization:
Mesostructures-based materials

Terms: Payment of $11,000 within 30 days of signing; a running royalty ranging from 2.0% to 5.0% and 50% of revenue from sublicensing. The agreement includes annual minimums and commercialization milestones.

Services Provided: By MSU to InPore Technologies, Inc.: None under contemplated agreement.
By InPore Technologies, Inc. to MSU: None under contemplated agreement.

Use of University Facilities/Personnel:
No use of MSU facilities/personnel by InPore Technologies, Inc. under the Restated and Amended Exclusive License

Organization Type: Incorporated Michigan-based small business.

Personnel Interest: Dr. Thomas J. Pinnavaia, a Professor in the Department of Chemistry, and his immediate family own or have an option to buy an equity interest of more than 1% of the company. Dr. Pinnavaia is also an officer of InPore Technologies, Inc.

MICHIGAN STATE
UNIVERSITY

Attachment B
(Approved by the Board of Trustees on June 19, 2009)

June 10, 2009

MEMORANDUM

To: Trustee Policy Committee

From: Kim A. Wilcox, Provost KAW

Re: Approval of Contract Terms: *Claytech, Inc.*

Recommendation:

BE IT RESOLVED that the Trustee Policy Committee recommends to the Board of Trustees that it approve the execution of a contract with *Claytech, Inc.*, consistent with earlier public notice given at a Board meeting and with the "License Agreement Term Sheet" now presented to the Board for inclusion in its minutes.

Background:

In compliance with State law, public notice of the University's intent to negotiate contracts with *Claytech, Inc.*, a Michigan corporation based in East Lansing, was given at the Board of Trustees' meeting on February 13, 2002.

The terms of a license agreement with *Claytech, Inc.* are now being presented for approval.

Dr. Thomas J. Pinnavaia, a Professor in the Department of Chemistry, and his immediate family own or have an option to buy an equity interest of more than 1% of the company. Dr. Pinnavaia is also an officer of *Claytech, Inc.*

The attached "License Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *Claytech, Inc.*

Cc: Trustee Finance Committee
President Lou Anna K. Simon
Vice President Fred Poston
Vice President J. Ian Gray
Vice President Robert A. Noto
Secretary Bill Beekman
Dr. Terry May
Director Michael Poterala
Deputy General Counsel Kristine Zayko

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LICENSE AGREEMENT TERM SHEET

Party:	Claytec, Inc.
License:	Exclusive license for commercial purposes
Term:	Ending at the expiration of the last to expire patent
Technology:	MSU Invention Disclosure No. TEC2007-0088, entitled "Mesoporous Metal Oxide - Polymer Mesocomposites," and any continuation, continuation-in-part, and divisional patent applications and issued patents derived from any of the foregoing.
Technology's Potential Commercial Utilization:	Mesostructures-based materials
Payment Terms:	Payment of $1,000 upon signing; a running royalty ranging from 3.0% to 4.0%. The agreement includes annual minimums and commercialization milestones.
Use of University Facilities/Services/Personnel:	No University facilities, services, or personnel will be utilized by Claytec, Inc. under the terms of the License Agreement.
Organization Type:	Incorporated Michigan-based small business
Personnel Interest:	Dr. Thomas J. Pinnavaia, a Professor in the Department of Chemistry, and his immediate family own or have an option to buy an equity interest of more than 1% of the company. Dr. Pinnavaia is also an officer of Claytec, Inc.

MICHIGAN STATE
UNIVERSITY

Attachment 1.b

September 7, 2010

MEMORANDUM

To: Trustee Policy Committee

From: Kim A. Wilcox, Provost

Re: Approval of Contract Terms: *XG Sciences, Inc.*

Recommendation:

BE IT RESOLVED that the Trustee Policy Committee recommends to the Board of Trustees that it approve the execution of a research contract with *XG Sciences, Inc.*, consistent with earlier public notice given at a Board meeting and with the "Research Contract Term Sheet" now presented to the Board for inclusion in its minutes.

Background:

In compliance with State law, public notice of the University's intent to negotiate contracts with *XG Sciences, Inc.* (formerly named *XG-Nano, Inc.*), a Michigan corporation based in East Lansing, was given at the Board of Trustees' meeting on June 16, 2006. The terms of a research contract are now being presented for approval.

Dr. Lawrence T. Drzal, a University Distinguished Professor in the Department of Chemical Engineering and Material Science, Dr. Hiroyuki Fukushima, a Research Specialist in the Composite Materials and Structures Center, and Dr. InHwan Do, a Research Specialist in the Composite Materials and Structures Center, and their immediate families each own or have options to buy an equity interest of more than 1% of the company. Dr. Drzal is also an officer of *XG Sciences, Inc.*

The attached "Research Contract Term Sheet" summarizes the agreement that MSU has negotiated with *XG Sciences, Inc.*

Cc: Trustee Finance Committee
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Vice President J. Ian Gray
Vice President Robert A. Noto
Secretary Bill Beekman
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RESEARCH CONTRACT TERM SHEET

Party:	XG Sciences, Inc.
Contract:	Sponsored Research Agreement from XG Sciences to MSU "Identification and alteration of the surface chemistry of exfoliated graphite nanoplatelets (eGnP)"
Term:	November 1, 2010 through October 30, 2014
Payment Terms:	$350,000 total: $45,000 for Phase 1 (November 1, 2010 through April 30, 2011), remaining $305,000 to be paid based on contractual milestones.
Services Provided:	By MSU to XG Sciences: research, testing and evaluation related to surface chemistry of eGnP By XG Sciences to MSU: none
Use of University Facilities/Personnel:	Use of MSU facilities/personnel by XG Sciences provided at prevailing rates for industrial research.
Organization Type:	Incorporated Michigan-based small business.
Personnel Interest:	Dr. Lawrence T. Drzal, a University Distinguished Professor in the Department of Chemical Engineering and Material Science, Dr. Hiroyuki Fukushima, a Research Specialist in the Composite Materials and Structures Center, and Dr. InHwan Do, a Research Specialist in the Composite Materials and Structures Center, and their immediate families each own or have options to buy an equity interest of more than 1% of the company. Dr. Drzal is also an officer of XG Sciences, Inc.

MICHIGAN STATE
UNIVERSITY

September 7, 2010

MEMORANDUM

To: Trustee Policy Committee

From: Kim A. Wilcox, Provost

Re: Approval of Contract Terms: *XG Sciences, Inc.*

Recommendation:

BE IT RESOLVED that the Trustee Policy Committee recommends to the Board of Trustees that it approve the execution of an amendment of a restated and amended license agreement with *XG Sciences, Inc.*, consistent with earlier public notice given at a Board meeting and with the "First Amendment of Restated and Amended Exclusive License Agreement Term Sheet" now presented to the Board for inclusion in its minutes.

Background:

In compliance with State law, public notice of the University's intent to negotiate contracts with *XG Sciences, Inc.* (formerly named *XG-Nano, Inc.*), a Michigan corporation based in East Lansing, was given at the Board of Trustees' meeting on June 16, 2006. The Board approved the terms of a license agreement at its meeting on September 12, 2007. (Attachment C.) The Board approved the terms of a restated and amended license agreement on April 16, 2010. (Attachment B.) The terms of an amendment to the restated and amended license agreement are now being presented for approval. (Attachment A.)

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Dr. Lawrence T. Drzal, a University Distinguished Professor in the Department of Chemical Engineering and Material Science, Dr. Hiroyuki Fukushima, a Research Specialist in the Composite Materials and Structures Center, and Dr. InHwan Do, a Research Specialist in the Composite Materials and Structures Center, and their immediate families each own or have options to buy an equity interest of more than 1% of the company. Dr. Drzal is also an officer of *XG Sciences, Inc.*

The attached "First Amendment of Restated and Amended Exclusive License Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *XG Sciences, Inc.*

Cc: Trustee Finance Committee
President Lou Anna K. Simon
Vice President Fred Poston
Vice President J. Ian Gray
Vice President Robert A. Noto
Secretary Bill Beekman

Dr. Terry May
Deputy General Counsel Kristine Zayko
Assistant General Counsel Lee Bollinger

Attachment A

FIRST AMENDMENT OF RESTATED AND AMENDED EXCLUSIVE LICENSE TERM SHEET

Party:	XG Sciences, Inc.
License:	First Amendment of Restated and Amended Exclusive License to add two additional Technologies and to record Technology elections under the Restated and Amended Exclusive License Agreement.
Term:	From the effective date of the Agreement extending to the expiration of the last to expire of the patents or 25 years, whichever comes first.
Technology:	U.S. Patent Application No. 12/072,460; U.S. Patent Application No. 11/897,723; U.S. Patent Application No. 12/587,645; MSU Invention Disclosures: TEC2010-0114 "Pi Coupling Agents for Dispersion of Exfoliated Graphene nanoplatelets in polymers"; TEC2011-0002 "Novel Thermoelectric Materials Based on Exfoliated Graphite Nanoplatelets"; TEC2008-0038 "Metal Nanoparticle and Conducting Polymer Nanocomposites for Energy Devices"; TEC2008-0074 "Single Graphene Sheets Decorated With Metal Nanoparticles; TEC2009-0029 "MetalOxide Nanosheet Monolayer Film Synthesis for Electrochemical Energy Storage and Photocatalytic Applications"; TEC2009-0113 "Exfoliated Graphite Nano Platelet (xGnP) anodes for Li-ion batteries"; TEC2010-0027 "Nanostructured Electrodes for Exfoliated Graphite Nanoplateletes for Supercapacitor Applications"; and TEC2010-0047 "Simple Dry Process for Scalable Production of High Surface Area, Graphene Nanoplatelets".

Technology's Potential Commercial Utilization:

Broad applications involving composite materials and components.

Payment Terms:	Payment of $6,000 for the addition of new Technologies.
Services Provided:	By MSU to XG Sciences: None under contemplated agreement.

By XG Sciences to MSU: None under contemplated agreement.

Use of University Facilities/Personnel:

No use of MSU facilities/personnel by XG Sciences under the contemplated agreement.

Organization Type: Incorporated, Michigan-based small business.

Personnel Interest: Dr. Lawrence T. Drzal, a University Distinguished Professor in the Department of Chemical Engineering and Material Science, Dr. Hiroyuki Fukushima, a Research Specialist in the Composite Materials and Structures Center, and Dr. InHwan Do, a Research Specialist in the Composite Materials and Structures Center, and their immediate families each own or have options to buy an equity interest of more than 1% of the company. Dr. Drzal is also an officer of XG Sciences, Inc.

Attachment B
(Approved by the Board of Trustees on April 16, 2010)

RESTATED AND AMENDED LICENSE TERM SHEET

Party:	XG Sciences, Inc.
License:	Restated and Amended Exclusive License on the Technology in all fields (with certain exceptions pursuant to third-party agreements if elected within 60 days of the effective date) and an option to license other related Technology for up to three (3) years from the effective date.
Term:	Extending to the expiration of the last to expire of the patents or 25 years whichever comes first.
Technology:	MSU Invention Disclosures TEC2002-0038 "Inexpensive Method for Producing Graphite Nanoplatelets"; TEC2004-0075 "Conductive Coatings Produced by Monolayer Deposition on Surfaces"; TEC2005-0088 "Method for Producing Metalloic Nanoparticles on Solid Surfaces especially Carbon and Graphite"; TEC2006-0039 "Hybrid Micro-Nano-Composite Material and Method to Prepare Thereof"; TEC2006-0054 "Continuous Process for Producing Exfoliated Nano-Graphite Platelets"; TEC2006-0070 "Electro-Conductive Nylon with High Barrier Property and Method to Prepare Thereof"; TEC2007-0072 "Micropatterning of Low Cost and Highly Conductive Exfoliated Graphite Nanoplatelets (xGnPs) using Microcontact Printing"; TEC2007-0121 "Conductive Sheet Molding Compound with Carbon Based Nanomaterials"; TEC2007-0122 "Conductive Coating of Substrate with Carbon-Based Nanomaterials"; TEC2007-0139 "Plasticized Cellulose as a Potential Alternative to Petroleum Based Polymers"; TEC2007-0150 "Modification of the Mechanical, Thermal, and Electrical Properties of Elastomer-Based Materials by the Addition of Exfoliated Graphite Nano-Platelets"; TEC2008-0002 "High-Performance Biosensors Based on Exfoliated Graphite Nanoplatelets and Nanometal Decorations"; TEC2008-0033 "Materials and Process for Sub-10 Nanometer Integrated Circuit Lines"; TEC2008-0038 "Metal nanoparticle and conducting polymer nanocomposites for energy devices"; TEC2008-0039 "Electrospinning ordered arrays of cellulose nitrate fibers"; TEC2008-0042 "Electrically Conductive, Optically Transparent Films of Exfoliated Graphite Nanoplatelets (Graphene)"; TEC2008-0074 "Single Graphene Sheets Decorated With Metal

Nanoparticles"; TEC2008-0079 "xGnP-based Lubricant"; TEC2009-0006 "Polyoxometalate-based Modification of Exfoliated Graphite Nanoplatelets to Produce Electrocatalysts'; TEC2009-0020 "Fabrication of Electrically Conductive and Optically Transparent Films with Graphene NanoPlatelets or Other Nanoparticles"; TEC2009-0029 "MetalOxide Nanosheet Monolayer Film Synthesis for Electrochemical Energy Storage and Photocatalytic Applications"; TEC2009-0030 "Electrically Conductive Highly Aligned Multilayer Free Standing Film of Exfoliated Graphite Nanoplatelets (Graphene)"; TEC2009-0031 "Exfoliated Graphite Nanoplatelets (Graphene) and Conductive Polymer Multilayer Free Standing Film Electrode for Ultra and Supercapacitor Applications"; TEC2009-0113 "Exfoliated Graphite Nano Platelet (xGnP) anodes for Li-ion batteries"; TEC2010-0027 "Nanostructured Electrodes for Exfoliated Graphite Nanoplateletes for Supercapacitor Applications"; and TEC2010-0047 "Simple Dry Process for Scalable Production of High Surface Area, Graphene Nanoplatelets".

Technology's Potential Commercial Utilization:

Broad applications involving composite materials and components.

Payment Terms: Payment of $10,000 due on signing; $3,000 plus patent costs to date for each Invention Disclosure elected; a running royalty of 2% to 4% of net sales and any sublicensing revenues with annual minima ranging from $10,000 to $50,000 starting in calendar year 2011.

Services Provided: By MSU to XG Sciences: None under contemplated agreement.

By XG Sciences to MSU: None under contemplated agreement.

Use of University Facilities/Personnel:

No use of MSU facilities/personnel by XG Sciences under the contemplated agreement.

Organization Type: Incorporated, Michigan-based small business.

Personnel Interest:

Dr. Lawrence T. Drzal, a University Distinguished Professor in the Department of Chemical Engineering and Material Science, Dr. Hiroyuki Fukushima, a Research Specialist in the Composite Materials and Structures Center, and Dr. InHwan Do, a Research Specialist in the Composite Materials and Structures Center, and their immediate families each own or have options to buy an equity interest of more than 1% of the company. Dr. Drzal is also an officer of *XG Sciences, Inc.*

Attachment C
(Approved by the Board of Trustees on September 12, 2007)

LICENSE TERM SHEET

Party: XG Sciences, Inc.

License: Exclusive license to practice the Technology in all available fields.

Term: Extending to the expiration of the last to expire of the patents.

Technology: MSU Invention Disclosure No. 02038F "Inexpensive Method for Producing Graphite Nanoplatelets"; MSU Invention Disclosure No. 06054 "Continuous Process for Producing Exfoliated Nano-Graphite Platelets"; MSU Invention Disclosure No. 04119 "Improved Performance Battery Electrodes, Formulation and Process"; MSU Invention Disclosure No. 06039 "Hybrid Micro-Nano-Composite Material and Method to Prepare Thereof"; MSU Invention Disclosure No. 06052 "High Strength Fuel Barrier Nanocomposite"; MSU Invention Disclosure No. 06057 "Electro-Conductive Resin with Higher Barrier Property and Method to Prepare Thereof"; MSU Invention Disclosure No. 06070 "Electro-Conductive Nylon with High Barrier Property and Method to Prepare Thereof"; MSU Invention Disclosure No. 05088 "Method for Producing Metallic Nanoparticles on Solid Surfaces Especially Carbon and Graphite"; MSU Invention Disclosure No. 02023 "Chemical Functionization of Material Surfaces Using Ultraviolet Light and Water Solutions"; MSU Invention Disclosure No. 96046 "An Ultra Violet Light Process for Pretreatment of Surfaces of Polymers, Polymer Composites and Metals Prior to Adhesive Bonding or Painting"; and MSU Invention Disclosure No. 01026 "Surface Treatment of Fibers Using Ultraviolet Light in Ozone;" and associated patents and patent applications.

Technology's Potential Commercial Utilization:
Broad applications involving composite materials and components.

Payment Terms: Payment by XG Sciences, Inc. to MSU of: a) $25,000 within 30 days after effective date of license; b) a running royalty of $0.30 per pound of licensed material sold; c) a royalty of 3% of sales of material processed with ultraviolet light using licensed technology; and d) 25% of sublicensing revenues. Annual minimum aggregate payments from XG Sciences, Inc. to MSU shall be $5,000 for calendar years 2008 and 2009, and $50,000

thereafter. MSU will also receive 2% of XG Sciences, Inc. capital stock within 30 days after the effective date of the license.

Services Provided: By MSU to XG Sciences, Inc.: None under contemplated agreement.

By XG Sciences, Inc. to MSU: None under contemplated agreement.

Use of University Facilities/Personnel:
No use of MSU facilities/personnel by XG Sciences, Inc. under the contemplated agreement.

Organization Type: Incorporated, Michigan-based small business.

Personnel Interest: Dr. Lawrence T. Drzal, Department of Chemical Engineering and Materials Science, Dr. Hiroyuki Fukushima, Composite Materials and Structures Center, and Dr. In-Hwan Do, Composite Materials and Structures Center, and their immediate families each own or have options to buy an equity interest of more than 5% of the company. Dr. Drzal is also an officer in XG Sciences, Inc.

MICHIGAN STATE
UNIVERSITY

Attachment 1.d

September 7, 2010

MEMORANDUM

To: Trustee Policy Committee

From: Kim A. Wilcox, Provost KAW

Re: Approval of Contract Terms: *ZuvaChem, Inc.*

Recommendation:

BE IT RESOLVED that the Trustee Policy Committee recommends to the Board of Trustees that it approve the execution of an agreement with *ZuvaChem, Inc.*, consistent with earlier public notice given at a Board meeting and with the "Research Contract Term Sheet" now presented to the Board for inclusion in its minutes.

Background:

In compliance with State law, public notice of the University's intent to negotiate contracts with *ZuvaChem, Inc.*, a Delaware corporation with its principal place of business in Baltimore, Maryland, was given at the Board of Trustees' meeting on April 16, 2010. The terms of a research contract are now being presented for approval.

Dr. Thomas Sharkey, a Professor in the Department of Biochemistry and Molecular Biology, and his immediate family hold an ownership interest which exceeds 1% of the company.

The attached "Research Contract Term Sheet" summarizes the agreement that MSU has negotiated with *ZuvaChem, Inc.*

Cc: Trustee Finance Committee
President Lou Anna K. Simon
Vice President Fred Poston
Vice President J. Ian Gray
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Secretary Bill Beekman
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RESEARCH CONTRACT TERM SHEET

Party: ZuvaChem, Inc.

Contract: Sponsored Research Agreement between ZuvaChem and MSU ("Identification of an isoprene synthase that will increase the production of isoprene in genetically engineered cyanobacteria")

Term: October 1, 2010 through March 31, 2011

Potential Commercial Utilization:

Improved and sustainable production of Isoprene via an engineered organism.

Payment Terms: ZuvaChem will sponsor research at and pay MSU $45,000, $15,000 at inception, and $30,000 at conclusion of project.

Services Provided: By MSU to ZuvaChem: research regarding isoprene synthase genes and protein expression.

By ZuvaChem to MSU: None under contemplated agreement.

Use of University Facilities/Personnel:

Use of MSU facilities and personnel provided at prevailing rates for sponsored research.

Organization Type: Delaware corporation with principal place of business in Baltimore, Maryland.

Personnel Interest: Dr. Thomas Sharkey, a Professor in the Department of Biochemistry and Molecular Biology, and his immediate family hold an ownership interest which exceeds 1% of the company.