


**MICHIGAN STATE**  
**U N I V E R S I T Y**

April 2, 2013

MEMORANDUM

To: Trustee Policy Committee  
From: June Youatt, Acting Provost   
Re: Approval of Contract Terms: *Biophotonic Solutions, 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 *Biophotonic Solutions, 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 *Biophotonic Solutions, Inc.*, a Michigan corporation based in East Lansing, was given at the Board of Trustees' meeting on October 10, 2003. The terms of an amendment to a license agreement are now being presented for approval.

Dr. Marcos Dantus, a Professor in the Department of Chemistry, and his immediate family own or have options to buy an equity interest of more than 1% of the company. Dr. Dantus is also an officer of *Biophotonic Solutions, Inc.*

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



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Cc: Trustee Finance Committee  
President Lou Anna K. Simon  
Vice President Mark Haas  
Vice President Satish Udpa  
Vice President Steve Hsu  
Vice President Robert A. Noto  
Secretary Bill Beekman  
Dr. Terry May  
Deputy General Counsel Kristine Zayko  
Assistant General Counsel Lee Bollinger

## LICENSE AMENDMENT TERM SHEET

**Party:** Biophotonic Solutions, Inc.

**License:** Second amendment to exclusive license agreement

**Term:** Extending to the expiration of the last to expire patent

**Technology:** MSU invention disclosures and related patents:  
TEC2000-0086, Optimal Laser Desorption and Ionization Source for Mass Spectrometry  
TEC2004-0052, Binary Laser Pulse Shaping  
TEC2005-0056, Laser Selective Excitation  
TEC2005-0099, Femtosecond Laser Output Optimization  
TEC2006-0043, Laser-Based Identification of Stereoisomers  
TEC2006-0055, Laser Source for Material Processing  
TEC2006-0092, Control System and Apparatus for Use with Ultra-Fast Laser  
TEC2007-0029, Dispersion Compensation for Lasers  
TEC2009-0033, Autocorrelation Laser Pulse Measurement Using Phase Modulator  
TEC2009-0034, Autocorrelation Laser Pulse Measurement Using Phase Modulator with Novel Programming Function  
TEC2009-0045, Ultrafast Protein Activation  
TEC2009-0076, Pulse Compression Method  
TEC2011-0061, Adaptive Laser for Action in Variably Dispersive Substrates

### Technology's Potential Commercial Utilization:

Scientific, clinical, and industrial instrumentation, communications, homeland security, and laser devices

**Payment Terms:** Under license agreement with Biophotonic Solutions dated October 21, 2009, Biophotonic Solutions owes University \$243,124.33 in unpaid patent expenses through March 22, 2013.

MSU agrees to convert \$150,000 of the total outstanding amount to an equity interest in Biophotonic Solutions issued to the Michigan State University Foundation in Preferred Series "A" Stock. A valuation of Biophotonic Solutions was performed by an independent third party evaluator.

For remaining balance of \$93,124.33 owed University, Biophotonic Solutions will pay University \$4,000 per month beginning 30 days after effective date of amendment until balance is paid in full.

**Services Provided:** By MSU to Biophotonic Solutions: None under contemplated amendment  
By Biophotonic Solutions to MSU: None under contemplated amendment

### Use of University Facilities/Personnel:

None

**Organization Type:** Michigan-based corporation

**Personnel Interest:**

Dr. Marcos Dantus, a Professor in the Department of Chemistry, and his immediate family own or have options to buy an equity interest of more than 1% of the company. Dr. Dantus is also an officer of Biophotonic Solutions, Inc.

**MICHIGAN STATE**  
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April 2, 2013

MEMORANDUM

To: Trustee Policy Committee  
From: June Youatt, Acting Provost *JPY*  
Re: Approval of Contract Terms: *KTM Industries, 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 *KTM Industries, 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 *KTM Industries, Inc.*, a Michigan corporation based in Lansing, was given at the Board of Trustees' meeting on June 17, 2002. The terms of an amendment to a license agreement are now being presented for approval.

Dr. Ramani Narayan, a Professor in the Department of Chemical Engineering and Materials Science, and Dr. Marcos Dantus, a Professor in the Department of Chemistry, and their families each own or have options to buy an ownership interest of more than 1% of the company. Dr. Narayan is also an officer of *KTM Industries, Inc.*

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

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President Lou Anna K. Simon  
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## LICENSE AMENDMENT TERM SHEET

**Party:** KTM Industries, Inc.

**Contract:** Second amendment to exclusive license agreement

**Term:** Ending on the later of the expiration of the last to expire patent or February 6, 2023.

**Technology:** MSU invention disclosures and related patent:

TEC2002-0075 "Engineered Starch Foams with Enhanced Water Resistance, Flexibility, and Cushioning Properties"  
TEC2002-0078 "Extruded Starch Foam as in Insulation Material"  
TEC2002-0079 "Biodegradable Additives for Manufacturing Non Brittle Foamed Starch Sheets"  
TEC2002-0081 "Improved Processing Method for the Production of Less Dense and More Flexible Foamed Starch Packaging Sheets"  
TEC2003-0013 "Water Resistant Natural Polymer Coatings for Soluble Foamed Starch Materials"  
TEC2005-0012 "Amphiphilic Starch-Polyester Biodegradable Graft Copolymers, the Method of Preparation thereof and Its Use in Water Resistant Starch Foams"

U.S. Patent No. 7,638,560

### **Technology's Potential Commercial Utilization:**

Biodegradable engineered foam.

**Payment Terms:** To encourage future third party investment in KTM Industries, the parties agree to remove provision in license giving MSU the right to convert payments due for patent expenses and annual minimum royalties into an equivalent equity interest in KTM Industries.

**Services Provided:** By MSU to KTM: none under contemplated amendment.  
By KTM to MSU: none under contemplated amendment.

**Use of University Facilities/Personnel:**

None.

**Organization Type:** Michigan corporation based in Lansing.

**Personnel Interest:** Dr. Ramani Narayan, a Professor in the Department of Chemical Engineering and Materials Science, and Dr. Marcos Dantus, a Professor in the Department of Chemistry, and their families each own or have options to buy an ownership interest of more than 1% of the company. Dr. Narayan is also an officer of KTM Industries.

**MICHIGAN STATE**  
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April 2, 2013

MEMORANDUM

To: Trustee Policy Committee  
From: June Youatt, Acting Provost *JPY*  
Re: Approval of Contract Terms: *Metna Co.*

Recommendation:

BE IT RESOLVED that the Trustee Policy Committee recommends to the Board of Trustees that it approve the execution of a contract with *Metna Co.*, consistent with earlier public notice given at a Board meeting and with the "Research 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 *Metna Co.*, a Delaware corporation based in Lansing, Michigan, was given at the Board of Trustees' meeting on January 27, 2012. The terms of a sponsored research agreement are now being presented for approval.

Dr. Parviz Soroushian, a Professor in the Department of Civil and Environmental Engineering, and his family own or have options to buy an ownership interest of more than 1% of the company. Dr. Soroushian is also the President of *Metna Co.*

The attached "Research Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *Metna Co.*



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Assistant General Counsel Lee Bollinger

## RESEARCH AGREEMENT TERM SHEET

- Party:** Metna Corporation
- Contracts:** Sponsored research agreement  
“Ultra-High Performance Concrete”
- Term:** From the effective date of the agreement to 30 November 2013
- Payment Terms:** \$45,000
- Services Provided:** By MSU to Metna Corporation: devise criteria and procedures for selection of “Ultra-High Performance Concrete” (“UHPC”) raw materials, development of UHPC mix designs tailored towards locally available materials, and reliable, practical and scalable mixing, placement, curing and quality control of UHPC.
- By Metna Corporation to MSU: None under contemplated agreement.
- Use of University Facilities/Personnel:**  
Use of MSU facilities/personnel by Metna Corporation provided at prevailing rates for industrial research.
- Organization Type:** Delaware corporation based in Lansing, Michigan.
- Personnel Interest:** Dr. Parviz Soroushian, a Professor in the Department of Civil and Environmental Engineering, and his family own or have options to buy an ownership interest of more than 1% of the company. Dr. Soroushian is also the President of Metna Corporation.

**MICHIGAN STATE**  
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April 2, 2013

MEMORANDUM

To: Trustee Policy Committee  
From: June Youatt, Acting Provost *JPY*  
Re: Approval of Contract Terms: *nanoRETE, 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 *nanoRETE, Inc.*, consistent with earlier public notice given at a Board meeting and with the "Material Transfer 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 *nanoRETE, Inc.*, a company based in Lansing, Michigan, was given at the Board of Trustees' meeting on June 22, 2012. The terms of a material transfer agreement are now being presented for approval.

Dr. Evangelyn Alocilja, a Professor in the Department of Biosystems & Agricultural Engineering, and her family own or have options to buy an ownership interest of more than 1% of the company.

The attached "Material Transfer Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *nanoRETE, Inc.*

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## MATERIAL TRANSFER AGREEMENT TERM SHEET

**Party:** nanoRETE, Inc.

**Agreement:** Material Transfer Agreement

**Term:** From the effective date of the agreement to the earliest of the following dates: (1) when the material becomes generally available from third parties, (2) on completion of nanoRETE's research with the material, (3) on thirty days written notice by either party to the other, or (4) two years from the effective date.

**Material:** Shiga-toxin producing escherichia coli strains

**Payment Terms:** nanoRETE to pay MSU \$120 for its preparation and distribution costs

**Services Provided:** By MSU to nanoRETE: None under contemplated agreement  
By nanoRETE to MSU: None under contemplated agreement

**Use of University Facilities/Personnel:**  
MSU to provide access to nanoRETE to e-coli strains owned by MSU

**Organization Type:** Lansing-based company

**Personnel Interest:** Dr. Evangelyn Alocilja, a Professor in the Department of Biosystems & Agricultural Engineering, and her family own or have options to buy an ownership interest of more than 1% of the company.

**MICHIGAN STATE**  
**UNIVERSITY**

April 2, 2013

MEMORANDUM

To: Trustee Policy Committee  
From: June Youatt, Acting Provost *JPY*  
Re: Approval of Contract Terms: *Red Cedar Technology, 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 *Red Cedar Technology, 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 *Red Cedar Technology, Inc.*, a Michigan corporation based in East Lansing, was given at the Board of Trustees' meeting on April 11, 2003. The terms of an amendment to a license agreement are now being presented for approval.

Dr. Ron Averill and Dr. Erik Goodman, both Professors in the College of Engineering, and their families each own or have options to buy an ownership interest of more than 1% of the company. Drs. Averill and Goodman are also officers of *Red Cedar Technology, Inc.*

The attached "License Amendment Term Sheet" summarizes the agreement that MSU has negotiated with *Red Cedar Technology, Inc.*,

Cc: Trustee Finance Committee  
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## LICENSE AMENDMENT TERM SHEET

**Party:** Red Cedar Technology, Inc.

**License:** Second amendment to license agreement

**Term:** Extending to the longer of either the expiration of the last to expire of the patent or copyright or fifteen years from the effective date. Royalty buyout, described in "Payment Terms" section below, has a term of four months, which may be extended by Red Cedar Technology for two additional months for \$10,000.

**Technology:** MSU Invention Disclosure Nos.:

TEC2004-0072: An Algorithm for Design Optimization of Sub-Systems within Complex Systems and related patents

TEC2000-0100: GALOPPS Software

**Technology's Potential Commercial Utilization:**

Design automation and optimization solutions to structural, fluid, or thermal components and multi-component systems.

**Background:** Red Cedar Technology is currently in negotiations with a large company that has expressed an interest in acquiring the assets of, or making a significant equity investment in, Red Cedar Technology. MSU has an interest in encouraging this investment in or acquisition of a current licensee insofar as (a) a sale of Red Cedar Technology's assets to a third party would lead to the distribution of cash proceeds to the owners of equity in Red Cedar Technology, which includes the Michigan State University Foundation, and (b) an investment by a third party in Red Cedar Technology would better position it to commercialize MSU's licensed technologies.

The third party company with which Red Cedar Technology is in negotiations has indicated that a precondition of any investment in or acquisition of Red Cedar Technology is the termination of the royalty obligation attached to the licensed GALOPPS Software under the current license. The proposed amendment agreement would allow Red Cedar Technology to buyout this royalty obligation. Additionally, in the event Red Cedar Technology exercises the royalty buyout option in connection with a sale of its assets to the third party, under the proposed amendment MSU would agree to consent to the assignment of the license agreement to the acquiring company, as described more fully below.

**Payment Terms:** Red Cedar Technology to pay MSU \$4,000 for a four-month option to buy out royalty obligation with respect to the licensed GALOPPS software, the term of which option may be extended for two months by Red Cedar Technology for an additional \$10,000. Red Cedar Technology's exercise of the royalty buyout option is contingent upon: (a) Red Cedar Technology securing a third party equity investment of at least \$2,000,000 or a third party's written commitment to purchase all of Red Cedar Technology's assets; and (b) Red Cedar Technology's payment of \$25,092.28 in unpaid legal costs. Additionally, if Red Cedar Technology exercises the royalty buyout option, it will pay MSU either a one-time payment of \$39,800 or an annual payment of \$8,000 per year for seven years.

All payment terms applicable to other technology licensed under the agreement remain unchanged.

If Red Cedar Technology exercises the royalty buyout option in connection with a sale of its assets to a third party, MSU agrees to consent to the assignment of the license to the third party, provided that Red Cedar Technology has fulfilled all obligations under the license, as amended.

**Services Provided:** By MSU to Red Cedar Technology: None under contemplated amendment  
By Red Cedar Technology to MSU: None under contemplated amendment

**Use of University Facilities/Personnel:**

None

**Organization Type:** Incorporated, Michigan-based small business

**Personnel Interest:** Dr. Ron Averill and Dr. Erik Goodman, both Professors in the College of Engineering, and their families each own or have options to buy an ownership interest of more than 1% of the company. Drs. Averill and Goodman are also officers of Red Cedar Technology, Inc.

**MICHIGAN STATE**  
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April 2, 2013

MEMORANDUM

To: Trustee Policy Committee  
From: June Youatt, Acting Provost *J P Y*  
Re: Approval of Contract Terms: *Salgomed, 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 *Salgomed, Inc.*, consistent with earlier public notice given at a Board meeting and with the "Option 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 *Salgomed, Inc.*, a company based in California, was given at the Board of Trustees' meeting on January 25, 2013. The terms of an option agreement are now being presented for approval.

Dr. Carlo Piermarocchi, a Professor in the Department of Physics and Astronomy, and his family own or have options to buy an ownership interest of more than 1% of the company. Dr. Piermarocchi is also a partner in *Salgomed, Inc.*

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



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Assistant General Counsel Lee Bollinger

## OPTION AGREEMENT TERM SHEET

**Party:** Salgomed, Inc.  
**License:** Option on patent rights  
**Term:** Two years from the effective date of the agreement  
**Technology:** MSU Invention Disclosure No. and U.S. Patents:

MSU invention disclosure TEC2013-0028 entitled "Method for reconstruction of drug-target networks to predict effective combinatorial therapies"

Provisional Patent Serial No. 61/709,112 filed October 2, 2012 "Method for reconstruction of drug-target networks to predict effective combinatorial therapies"

The parties may add or remove technologies under the agreement, including improvements, provided that the change does not affect the financial consideration of the parties or the nature or extent of any pecuniary interest of MSU personnel.

### Technology's Potential Commercial Utilization:

Evaluating therapeutic drug combinations.

### Payment Terms:

\$2,000 option fee.

### Services Provided:

By MSU to Salgomed, Inc.: None.

By Salgomed, Inc. to MSU: None.

### Use of University Facilities/Personnel:

None

### Organization Type:

Corporation based in California.

### Personnel interest:

Dr. Carlo Piermarocchi, a Professor in the Department of Physics and Astronomy, and his family own or have options to buy an ownership interest of more than 1% of the company. Dr. Piermarocchi is also an officer of *Salgomed, Inc.*

**MICHIGAN STATE**  
**UNIVERSITY**

April 2, 2013

MEMORANDUM

To: Trustee Policy Committee  
From: June Youatt, Acting Provost *JPY*  
Re: Approval of Contract Terms: *Stem ED, LLC*.

Recommendation:

BE IT RESOLVED that the Trustee Policy Committee recommends to the Board of Trustees that it approve the execution of a contract with *Stem ED, LLC*, consistent with earlier public notice given at a Board meeting and with the "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 *Stem ED, LLC*, a limited liability company based in East Lansing, was given at the Board of Trustees' meeting on June 22, 2012. The terms of program evaluation services agreement are now being presented for approval.

Dr. Julie Libarkin, an Associate Professor in the College of Natural Sciences, and Dr. Stephen Thomas, an Assistant Professor in the College of Natural Sciences, and their families own or have options to buy an ownership interest of more than 1% of the company. Drs. Libarkin and Thomas are also managers of *Stem ED, LLC*.

The attached "Agreement Term Sheet" summarizes the agreement that MSU has negotiated with *Stem ED, LLC*.

Cc: Trustee Finance Committee  
President Lou Anna K. Simon  
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## AGREEMENT TERM SHEET

**Party:** Stem ED, LLC

**Term:** From the effective date of the agreement to July 31, 2015

**Contract:** Program evaluation services agreement

**Payment Terms:** \$40,000 to Stem ED, LLC

MSU Purchasing evaluated the market for these services and concluded that Stem ED, LLC's proposed price was at or below the fair market value of the services.

**Services Provided:** By MSU to Stem ED, LLC: None under contemplated agreement.

By Stem ED, LLC to MSU: Evaluation of educational materials, creation of educational assessment tools, and training of personnel through workshops, seminars, and one-on-one trainings.

**Use of University Facilities/Personnel:**

None

**Organization Type:** Limited liability company based in East Lansing

**Personnel Interest:** Dr. Julie Libarkin, an Associate Professor in the College of Natural Sciences, and Dr. Stephen Thomas, an Assistant Professor in the College of Natural Sciences, and their families own or have options to buy an ownership interest of more than 1% of the company. Drs. Libarkin and Thomas are also managers of Stem ED, LLC.