Pre-conference policy workshop: Towards enhanced EU-US innovation collaboration through policy measures Brussels: January 14th, 201

From research to innovation Commercialization challenges in bi-lateral cooperation for innovation: new frontiers in bio-polymers and advanced materials

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# Slovenian Innovation Policy framework

**Programme: Center of Excellence 2009 – 2013** 

**CE PoliMaT 2010 – 2013** 

- Independent non-profit research and innovation CE in the filed of polymer materials and technologies
- Founders: 22, private firms, SMEs and public research institutions
- Unique collaboration between academia and industry
- Investment: 10 mio EUR Structural funds

Strategy 2014 – 2020 puts biopolymers and bio based materials into the focus – Poly4EmI: biopolymers for emerging industries



# BioEconomy – builds on biopolymers and bio based materials

### Jobs:

Over 1 million by 2030

### **Products, Energy:**

Reduce dependence on imports with locally sourced

### **Growth:**

€200 billion by 2020

### Climate:

Emissions reduction potential of least 50% compared to fossil alternatives



## Challenges

- How to exploit transformative power of biopolymers and bio based materials
- How to change the way polymers are produced and used in different applications?
- How to leverage the power of new knowledge spread over the globe and regions to help to address the global economic and environmental challenges?





## Fact findings mission to Boston, May 2012





- Conference Technology and innovation for global development biopolymers as disruptive technology
- Meeting world leader on health, medical devices like Mass General Hospital

Recognition of high potential of biopolymers for development, but new partners and new cooperation need to turn R&D into innovation



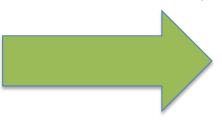
# New regional and international cooperation models

## Design and implementation models:

- integrates industry and academia along the whole innovation value chain
- creates new cross-sector interconnections,
- supports cross-industry clusters, and
- successfully facilitates international partnerships, networks, and investments.

# New ways of innovation centered collaboration

- Bi-lateral cooperation with the Austen BioInnovation Institute in Akron, Ohio (ABIA)
- Turning Bi-lateral cooperation into long-term strategic partnerships and broaden base - Global Biopolymer Network (GBN)





# **EU-US Cooperation in Polymer Materials and Technologies**

Innovation Austen BioInnovation Institute in Akron, USA (ABIA)

## APIC - ABIA POLIMATA INNOVATION COLABORATION:

- current and potential applications of novel bio-polymers in the areas of:
- wound healing and medical implants
- innovations in the use of advanced polymeric materials in agriculture and food production in developing regions
- others

CE PoliMaT's Innovation Office at the Akron Global Business Accelerator (AGBA)

- Business development
- Placement of start ups in Akron
- Joint ventures







# Focus on ways to exploit "complementarity" between and among the participating entities

#### **CE POliMaT needs**

- Better access to new bio based value chains and venture capital
- Collaboration with peers to enable excellence in innovation and commercialization
- Soft-landing" in US rapid technology commercialization.
- Akron with its broad international bridges with China, Finland, Israel, Lithuania and other countries enables CE PoliMaT to expand to other innovative countries in the world.

### **City of Akron needs**

- Akron scientific environment gained a new scientific collaboration partner in Europe that enables the expand of the University of Akron to Europe and EU funds.
- ABIA promotes value added engineering and accelerates translational research to biomedical commercialization with Int'l partners
- Promotion of AGBA as a proven small business accelerator.
- Promotion and widening of the innovation collaboration with and within Europe.



## Challenges encountered

- Different levels of policy
- Different financing models
- Different understanding of innovation and role of innovation in business development
- Different culture of information sharing and IPR models
- Different perspective on innovation networks



# Bilateral policy considerations

- Focus on ways to exploit "complementarity" between and among the participating entities.
- Engage respective institutional and commercial networks associated with the corresponding "value chain".
- Regional innovation policies of the participating EU and US entities have "priority sectors" to be considered.
- Consequences for measuring and evaluating respective policy platforms in terms of innovation results.
- Full involvement of investors and businesses requires specific timing corresponding to the various stages of technology development and product formulation.



## **Continuing Challenges**

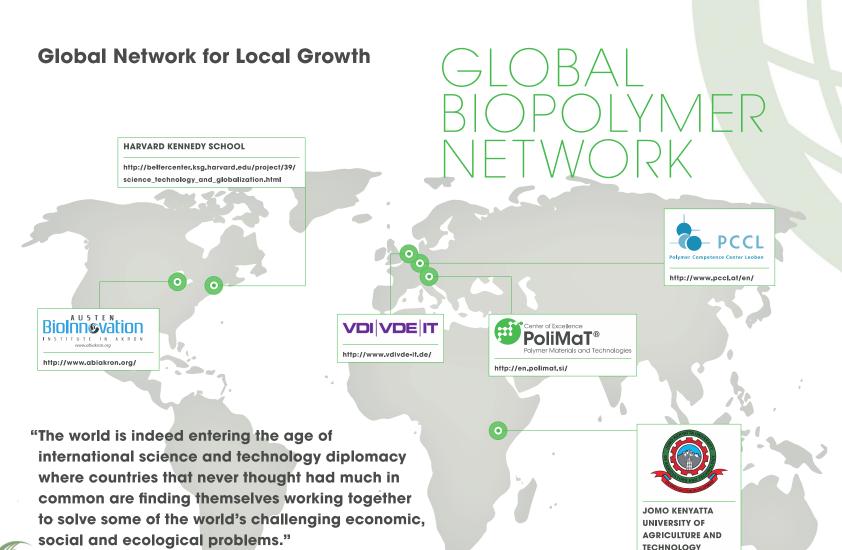
- Collective learning and network formation on the part of bilateral collaboration participants.
- How to use Global Biopolymer Network to enhance bilateral cooperation.
- Significant differences in concepts of commercialization used by EU and US participants.
- Require similar levels of maturity on the part of EU-US counterpart institutions.
- Need concrete market-oriented innovation results stemming from EU-US collaboration
- Improved understanding of the role of bi-lateral efforts in the formation of sector clusters.



# From innovation partners towards long-term strategic partnerships

, Professor of the Practice of International Development and Director of the Science,

on Project, Harvard Kennedy School, Harvard University



the ature

http://www.jkuat.ac.ke/

# Policy measures to tackle key challenges and provide better framework conditions

### First steps

- Peer review of policies to understand differences and set up suitable policy support to overcome them
- Benchmarking of potential / interested partners - to understand differences in structure, governance, goals, and services
- Setting up open innovation arena

### Followed by

- Facilitation setting up joint research, technology and innovation agenda to established joint platform supported by realistic financial scheme
- Providing secretariat and management of transatlantic cooperation
- Strengthen GBN to enhance bi-lateral cooperation.







## Thank you!

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