Research outputs:

**Magnetically activated microcapsules as controlled release carriers for a liquid PDMS cross-linker**
Research output: Research - peer-review › Journal article – Annual report year: 2019

**Advanced Wound Care Adhesives with New Functional Properties**
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

**A thermo-reversible silicone elastomer with remotely controlled self-healing**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Deeper Insight into the Dielectric Breakdown of Elastomers**
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

**Designing reliable silicone elastomers for high-temperature applications**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Enhancing the electro-mechanical properties of polydimethylsiloxane elastomers through blending with poly(dimethylsiloxane-co-methylphenylsiloxane) copolymers**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Enhancing the electro-mechanical properties of polydimethylsiloxane elastomers through blending with poly(dimethylsiloxane-co-methylphenylsiloxane) copolymers**
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

**Enhancing the electro-mechanical properties of polydimethylsiloxane elastomers through blending with poly(dimethylsiloxane-co-methylphenylsiloxane) copolymers Acknowledgments**
Research output: Research - peer-review › Poster – Annual report year: 2018

**Enhancing the electro-mechanical properties of polydimethylsiloxane elastomers through blending with poly(dimethylsiloxane-co-methylphenylsiloxane) copolymers Acknowledgments**
Research output: Research › Sound/Visual production (digital) – Annual report year: 2018

**Estimation of phase separation temperatures for polyethersulfone/solvent/non-solvent systems in RTIPS and membrane properties**
Glycerol-silicone elastomers as active matrices with controllable release profiles
Research output: Research - peer-review › Journal article – Annual report year: 2018

Glycerol-silicone elastomers as active membranes for wound dressings and beyond
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Glycerol-silicone elastomers – current status and perspectives
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Insight into the Dielectric Breakdown of Elastomers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Molecular Strategies for Improved Dielectric Elastomer Electrical Breakdown Strengths
Yu, L. & Skov, A. L. 2018 In : Macromolecular Rapid Communications. 39, 16, 6 p., 1800383
Research output: Research - peer-review › Journal article – Annual report year: 2018

Optimization Techniques for Improving the Performance of Silicone-Based Dielectric Elastomers
Research output: Research - peer-review › Journal article – Annual report year: 2018

Progress in electromechanically active polymers: selected papers from EuroEAP 2017: Editorial
Research output: Research - peer-review › Editorial – Annual report year: 2018

Screen the best ionic liquids for keratin dissolution by using COSMO-RS
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Simulation of Thermal Breakdown in a Multi-layered Stack of Dielectric Elastomers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Structure-property relationship in silicone networks
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Thermal degradation mechanisms of silicone elastomer
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018
Modelling of Thermal Breakdown in Dielectric Elastomers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Post Curing as an Effective Means of Ensuring the Long-term Reliability of PDMS Thin Films for Dielectric Elastomer Applications
Research output: Research - peer-review › Journal article – Annual report year: 2017

Silicone-based Dielectric Elastomers
Research output: Research › Doctoral thesis – Annual report year: 2017

Silicone elastomers with covalently incorporated aromatic voltage stabilisers
Research output: Research - peer-review › Journal article – Annual report year: 2017

Soft and flexible conductive PDMS/MWCNT composites
Research output: Research - peer-review › Journal article – Annual report year: 2017

The mechanism of fracture for entangled polymer liquids in extensional flow
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Voltage-stabilised elastomers with increased relative permittivity and high electrical breakdown strength by means of phase separating binary copolymer blends of silicone elastomers
Research output: Research - peer-review › Journal article – Annual report year: 2017

ZnO as a cheap and effective filler for high breakdown strength elastomers
Yu, L. & Skov, A. L. 2017 In : RSC Advances. 7, 8 p., 45784
Research output: Research - peer-review › Journal article – Annual report year: 2017

Dielectric electroactive polymer comprising an elastomeric film in the form of a gel
Research output: Research › Patent – Annual report year: 2016

A multiple length scale description of the mechanism of elastomer stretching
Research output: Research - peer-review › Journal article – Annual report year: 2016

A simple method for reducing inevitable dielectric loss in high-permittivity dielectric elastomers
Research output: Research - peer-review › Journal article – Annual report year: 2016
Bimodal condensation silicone elastomers as dielectric elastomers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Bimodal condensation silicone elastomers as dielectric elastomers
Research output: Research › Sound/Visual production (digital) – Annual report year: 2016

Bimodal condensation silicone elastomers as dielectric elastomers
Research output: Research - peer-review › Poster – Annual report year: 2016

Dielectric Elastomers (DEs) as EAPs: Materials
Research output: Research - peer-review › Book chapter – Annual report year: 2016

Electrical Breakdown and Mechanical Ageing in Dielectric Elastomers
Research output: Research - peer-review › Ph.D. thesis – Annual report year: 2016

Entangled Polymer Melts in Extensional Flow

Glycerol as high-permittivity liquid filler in dielectric silicone elastomers
Research output: Research - peer-review › Journal article – Annual report year: 2016

Glycerol as high-permittivity liquid filler in dielectric silicone elastomers
Research output: Research - peer-review › Poster – Annual report year: 2017

Green silicone elastomer obtained from a counterintuitively stable mixture of glycerol and PDMS
Research output: Research - peer-review › Journal article – Annual report year: 2016

Interpenetrated polymer networks based on commercial silicone elastomers and ionic networks with high dielectric permittivity and self-healing properties
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Interpenetrated polymer networks based on commercial silicone elastomers and ionic networks with high dielectric permittivity and self-healing properties
Research output: Research - peer-review › Poster – Annual report year: 2016

Interpenetrating polymer networks based on commercial silicone elastomers and ionic networks with high dielectric permittivity and self-healing properties
Research output: Research › Sound/Visual production (digital) – Annual report year: 2016

Linear Viscoelastic and Dielectric Relaxation Response of Unentangled UPy-Based Supramolecular Networks
Research output: Research - peer-review › Journal article – Annual report year: 2016
Silicone-modified graphene oxide fillers via the Piers-Rubinsztajn reaction
Research output: Research - peer-review › Journal article – Annual report year: 2016

Silicone rubbers for dielectric elastomers with improved dielectric and mechanical properties as a result of substituting silica with titanium dioxide
Research output: Research - peer-review › Journal article – Annual report year: 2015

Synthesis and characterization of UV photocrosslinkable hydrogels with poly(N-vinyl-2-pyrrolidone): Determination of the network mesh size distribution
Research output: Research - peer-review › Journal article – Annual report year: 2016

The Current State of Silicone-Based Dielectric Elastomer Transducers
Research output: Research - peer-review › Review – Annual report year: 2016

The role of transport processes on dielectric elastomer performance
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Silicone chain extender
Research output: Research › Patent – Annual report year: 2015

A new soft dielectric silicone elastomer matrix with high mechanical integrity and low losses
Research output: Research - peer-review › Journal article – Annual report year: 2015

A soft and conductive PDMS-PEG block copolymer as a compliant electrode for dielectric elastomers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

A solvent evaporation route towards fabrication of hierarchically porous ZSM-11 with highly accessible mesopores
Research output: Research - peer-review › Journal article – Annual report year: 2015

Bilaterally Microstructured Thin Polydimethylsiloxane Film Production
Research output: Research - peer-review › Journal article – Annual report year: 2015

Controlled release in hard to access places by poly(methyl methacrylate) microcapsules triggered by gamma irradiation
Research output: Research - peer-review › Journal article – Annual report year: 2015
Design of Elastomer Structure to Facilitate Incorporation of Expanded Graphite in Silicones Without Compromising Electromechanical Integrity
Research output: Research - peer-review › Journal article – Annual report year: 2015

Dielectric elastomers, with very high dielectric permittivity, based on silicone and ionic interpenetrating networks
Research output: Research - peer-review › Journal article – Annual report year: 2015

Dielectric properties of ultraviolet cured poly(dimethyl siloxane) sub-percolative composites containing percolative amounts of multi-walled carbon nanotubes
Research output: Research - peer-review › Journal article – Annual report year: 2015

Enhancement of dielectric permittivity by incorporating PDMS-PEG multiblock copolymers in silicone elastomers
Research output: Research - peer-review › Journal article – Annual report year: 2015

Enhancing relative permittivity by incorporating PDMS-PEG multi block copolymers in binary polymer blends
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Enhancing relative permittivity by incorporating PDMS-PEG multiblock copolymers in binary polymer blends
Research output: Research - peer-review › Poster – Annual report year: 2016

Functional silicone copolymers and elastomers with high dielectric permittivity
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Functional silicone elastomers via novel siloxane copolymers and chain extenders
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

High energy density interpenetrating networks from ionic networks and silicone
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Improving dielectric permittivity by incorporating PDMS-PEG block copolymer into PDMS network
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Investigation Into Accessible Surface Vinyl Concentrations of Nonstoichiometric PDMS Microspheres from Hydrosilylation Reactions and Their Further Crosslinking Reactions
Research output: Research - peer-review › Journal article – Annual report year: 2015

Materials science: Like cartilage, but simpler
Research output: Research - peer-review › Comment/debate – Annual report year: 2015
Mechanically invisible encapsulations

Modelling of Mass Transfer Phenomena in Chemical and Biochemical Reactor Systems using Computational Fluid Dynamics

Optimization of large-scale fabrication of dielectric elastomer transducers
Research output: Research › Ph.D. thesis – Annual report year: 2015

PDMS and MWCNT – How to Obtain an Efficient and Controlled Distribution of Conductive Fillers in PDMS
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Polydimethylsiloxane microspheres with poly(methyl methacrylate) coating: Modelling, preparation, and characterization
Research output: Research - peer-review › Journal article – Annual report year: 2015

Preparing mono-dispersed liquid core PDMS microcapsules from thiol–ene–epoxy-tailored flow-focusing microfluidic devices
Research output: Research - peer-review › Journal article – Annual report year: 2015

Soft Functional Silicone Elastomers with High Dielectric Permittivity: Simple Additives vs. Cross-Linked Synthesized Copolymers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Techniques for hot embossing microstructures on liquid silicone rubbers with fillers
Research output: Research - peer-review › Journal article – Annual report year: 2014

The electrical breakdown strength of pre-stretched elastomers, with and without sample volume conservation
, 055009
Research output: Research - peer-review › Journal article – Annual report year: 2015
The influence of static pre-stretching on the mechanical ageing of filled silicone rubbers for dielectric elastomer applications
Research output: Research - peer-review › Journal article – Annual report year: 2015

Mechanically Invisible Polymer Coatings
Research output: Research › Patent – Annual report year: 2015

A method of providing a barrier in a fracture-containing system
Research output: Research › Patent – Annual report year: 2014

Control of PDMS crosslinking by encapsulating a hydride crosslinker in a PMMA microcapsule
Research output: Research - peer-review › Journal article – Annual report year: 2015

Dielectric electroactive polymers comprising an ionic supramolecular structure
Research output: Research › Patent – Annual report year: 2014

Dielectric properties of supramolecular ionic structures obtained from multifunctional carboxylic acids and amines
Research output: Research - peer-review › Journal article – Annual report year: 2014

Effects of fillers on the properties of liquid silicone rubbers (LSRs)
Research output: Research - peer-review › Poster – Annual report year: 2014

Effects of fillers on the properties of liquid silicone rubbers (LSRs)
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Effects of fillers on the properties of liquid silicone rubbers (LSRs)
Research output: Research › Sound/Visual production (digital) – Annual report year: 2014

Encapsulated PDMS microspheres with reactive handles
Research output: Research - peer-review › Journal article – Annual report year: 2014

Favorable electrical breakdown strengths of prestretched elastomers with and without sample volume conservation
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Filled liquid silicone rubbers: Possibilities and challenges
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

High breakdown-strength composites from liquid silicone rubbers
Research output: Research - peer-review › Journal article – Annual report year: 2014
Improving dielectric permittivity by incorporating PDMS-PEG block copolymer into PDMS network
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2014

Large scale processing of dielectric electroactive polymers
Vudayagiri, S. & Skov, A. L. 2014 Technical University of Denmark, Department of Chemical and Biochemical Engineering. 168 p.
Research output: Research › Ph.D. thesis – Annual report year: 2014

Methods to ease the release of thin polydimethylsiloxane films from difficult substrates
Research output: Research › peer-review › Journal article – Annual report year: 2014

Monolithic growth of partly cured polydimethylsiloxane thin film layers
Research output: Research › peer-review › Journal article – Annual report year: 2014

Novel encapsulation technique for incorporation of high permittivity fillers into silicone elastomers
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

Novel method to prepare multiwalled carbon nanotube/poly(dimethyl siloxane) (MWCNT/PDMS) non-conducting composites
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2014

Novel water shutoff treatment using PDMS elastomer
Research output: Research › Ph.D. thesis – Annual report year: 2015

PEG-bis phosphonic acid based ionic supramolecular structures
Research output: Research › peer-review › Journal article – Annual report year: 2014

Physical characterization of photocrosslinked poly(vinyl pyrrolidone) (PVP) hydrogels for drug delivery
Research output: Research › peer-review › Conference abstract in proceedings – Annual report year: 2014

Preparation and Characterization of Silicone Liquid Core/Polymer Shell Microcapsules via Internal Phase Separation
Research output: Research › peer-review › Journal article – Annual report year: 2014

Sealing device and method for sealing fractures or leaks in wall or formation surrounding tube-shaped channel
Research output: Research › Patent – Annual report year: 2014

Silicone elastomers with high dielectric permittivity and high dielectric breakdown strength based on dipolar copolymers
Research output: Research › peer-review › Journal article – Annual report year: 2014
Soft silicone based interpenetrating networks as materials for actuators
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

Synthesis and characterizations of high permittivity ultraviolet cured soft elastomeric networks and composites applicable as dielectric electroactive polymer
Goswami, K., Skov, A. L. & Daugaard, A. E. 2014 Technical University of Denmark, Department of Chemical and Biochemical Engineering.
Research output: Research › Ph.D. thesis – Annual report year: 2015

Synthesis of telechelic vinyl/allyl functional siloxane copolymers with structural control
Research output: Research › peer-review › Journal article – Annual report year: 2014

Synthetic Strategies for High Dielectric Constant Silicone Elastomers
Research output: Research › Ph.D. thesis – Annual report year: 2015

The Electrical Breakdown of Thin Dielectric Elastomers: Thermal Effects
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

UV-Cured, Platinum-Free, Soft Poly(dimethylsiloxane) Networks
Research output: Research › peer-review › Journal article – Annual report year: 2014

Visualisation and characterisation of heterogeneous bimodal PDMS networks
Research output: Research › peer-review › Journal article – Annual report year: 2014

A control scheme for filament stretching rheometers with application to polymer melts
Research output: Research › peer-review › Journal article – Annual report year: 2013

Adhesion between Polydimethylsiloxane Layers by Crosslinking
Research output: Research › peer-review › Journal article – Annual report year: 2013

Concentrated Polymer Solutions are Different from Melts: Role of Entanglement Molecular Weight
Research output: Research › peer-review › Journal article – Annual report year: 2013

Development of novel PDMS elastomers for dielectric electroactive polymers (DEAPs)
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2013

Dielektrisk spektroskopi i aktion som nyttigt polymeranalyseværktøj
Research output: Research › Journal article – Annual report year: 2013
Dipolar cross-linkers for PDMS networks with enhanced dielectric permittivity and low dielectric loss
Research output: Research - peer-review › Journal article – Annual report year: 2013

Electromechanically active polymer transducers: research in Europe
Carpi, F., Graz, I., Jager, E., Skov, A. L. & Vidal, F. 2013 In : Smart Materials and Structures. 22, 10
Research output: Research - peer-review › Journal article – Annual report year: 2013

Factors affecting surface and release properties of thin PDMS films
Research output: Research - peer-review › Journal article – Annual report year: 2013

High dielectric permittivity elastomers from well-dispersed expanded graphite in low concentrations
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Intelligente materialer som kunstige muskler og energi-høstere
Research output: Communication › Journal article – Annual report year: 2013

Ionic networks derived from the protonation of dendritic amines with carboxylic acid end-functionalized PEGs
Research output: Research - peer-review › Journal article – Annual report year: 2013

Molecular Rheology of Complex Fluids
Huang, Q., Hassager, O., Skov, A. L. & Rasmussen, H. K. 2013 Technical University of Denmark, Department of Chemical and Biochemical Engineering. 217 p.
Research output: Research › Ph.D. thesis – Annual report year: 2013

Novel cross-linkers for PDMS networks for controlled and well distributed grafting of functionalities by click chemistry
Research output: Research - peer-review › Journal article – Annual report year: 2014

Novel silicone compatible cross-linkers for controlled functionalization of PDMS networks
Influence of micro- and nanofillers on electro-mechanical performance of silicone EAPs
Research output: Research › Conference article – Annual report year: 2012

Investigation of the properties of fully reacted unstoichiometric polydimethylsiloxane networks and their extracted network fractions
Research output: Research › peer-review › Journal article – Annual report year: 2012

Lamination of PDMS films by different methods
Research output: Research › Conference abstract for conference – Annual report year: 2012

Large amplitude oscillatory measurements as mechanical characterization methods for soft elastomers
Research output: Research › Conference article – Annual report year: 2012

Low moduli elastomers with low viscous dissipation
Research output: Research › peer-review › Journal article – Annual report year: 2012

Monolithic structures of DEAP films
Research output: Research › Conference abstract for conference – Annual report year: 2012

New Cross-linkers for PDMS Networks
Research output: Research › Conference abstract for conference – Annual report year: 2012

Novel silicone compatible cross-linkers for controlled and well distributed functionalization of PDMS networks
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2013

Planar elongation of soft elastomeric networks
Research output: Research › Conference abstract for conference – Annual report year: 2012

Preparation and Characterization of Anisotropic Films by Curing Hard Silicone Microspheres with Soft Silicone
Research output: Research › Conference abstract for conference – Annual report year: 2012

Role of stoma effluent on adhesion between skin-friendly adhesives and skin
Research output: Research › Conference abstract for conference – Annual report year: 2012

Stress relaxation and reversed flow of low-density polyethylene melts following uniaxial extension.
Huang, Q., Rasmussen, H. K., Skov, A. L. & Hassager, O. 2012 In : Journal of Rheology. 56, 6, p. 1535-1554
Research output: Research › peer-review › Journal article – Annual report year: 2012

Surface and release properties of PDMS films
Research output: Research › Conference abstract for conference – Annual report year: 2012
Transient Overshoot Extensional Rheology: Experimental and Numerical Comparisons
Research output: Research › Conference abstract for conference – Annual report year: 2012

Udvikling af materialer til kunstige muskler
Research output: Research › Journal article – Annual report year: 2012

Unimodal and bimodal networks performance as dielectric electroactive polymers (DEAPs)
Research output: Research › Conference abstract for conference – Annual report year: 2012

A rheological study on bimodal networks applied as electroactive polymers
Bejenariu, A. G. & Skov, A. L. 2011
Research output: Research › Conference abstract for conference – Annual report year: 2011

Cinnamic Acid Derivatised Poly(Ethylene Glycol) as a Bioinspired UV-Adaptable Material
Research output: Research › Conference abstract for conference – Annual report year: 2011

Experimental evaluation of the pseudotime principle for nonisothermal polymer flows
Research output: Research - peer-review › Journal article – Annual report year: 2011

Filament Stretching Rheometry
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Fremstilling af UV-aktive polymerer
Research output: Research - peer-review › Journal article – Annual report year: 2012

Influence of micro- and nanofillers on DEAP performance
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Influence of micro- and nanofillers on electro-mechanical performance of silicone EAPs
Research output: Research › Conference abstract for conference – Annual report year: 2012

New Cross-linkers for PDMS Networks
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

New elastomeric silicone based networks applicable as electroactive systems
Research output: Research - peer-review › Conference article – Annual report year: 2011

New Soft Polymeric Materials Applicable as Elastomeric Transducers
Bejenariu, A. G. & Skov, A. L. 2011
Research output: Research - peer-review › Poster – Annual report year: 2011
Novel Ionic Networks derived from the Protonation of Poly(Propylene Imine) Dendrimers with Carboxylic Acid-Telechelic PEG's
Research output: Research › Conference abstract for conference – Annual report year: 2011

Reversed planar elongation of soft polymeric networks
Research output: Research - peer-review › Journal article – Annual report year: 2011

Silicone based bimodal networks applicable as electroactive systems
Research output: Research › Conference abstract in proceedings – Annual report year: 2011

Stress maximum and steady extensional flow of branched polymer melts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Teaching chemical product design to engineering students: course contents and challenges
Skov, A. L. & Kiil, S. 2011
Research output: Research › Conference abstract for conference – Annual report year: 2011

UV-initierede *smart materials*
Frankær, S. M. G., Skov, A. L. & Kiil, S. 2011
Research output: Research › Conference abstract for conference – Annual report year: 2011

Rheology of Cross-linked Polymer Networks
Research output: Research › Ph.D. thesis – Annual report year: 2010

Large Amplitude Oscillatory Extension of Soft Polymeric Networks
Research output: Research - peer-review › Journal article – Annual report year: 2010

Planar elongation of soft polymeric networks
Research output: Research - peer-review › Journal article – Annual report year: 2010

Reversed extensional flow on polyisoprene melts
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Reversed extensional flow on polyisoprene melts
Research output: Research › Poster – Annual report year: 2010

Reversible large amplitude planar extension of soft elastomers
Research output: Research › Conference abstract for conference – Annual report year: 2010
Reversible planar elongational of soft polymeric networks
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2010

Silicone based electroactive polymers: application driven development
Bejenariu, A. G., Skov, A. L. & Hassager, O. 2010
Research output: Research › Poster – Annual report year: 2010

A comparative study on the influence of the platinum catalyst in poly(dimethylsiloxane) based networks synthesis
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Characterization of Polymer Networks by Swelling
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Elongational dynamics of multiarm polystyrene
Research output: Research › peer-review › Journal article – Annual report year: 2009

Linear rheology of cross-linked polypropylene oxide as a pressure sensitive adhesive
Research output: Research › peer-review › Journal article – Annual report year: 2009

New large amplitude oscillatory elongation method applied on elastomeric PDMS networks
Research output: Research › Poster – Annual report year: 2009

Optimization of the synthesis parameters for obtaining PDMS samples suitable for filament stretch rheometer measurements
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Planar Elongation Measurements on Soft Elastomers
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Self-consisting modeling of entangled network strands and dangling ends
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Constitutive equation for polymer networks with phonon fluctuations
Research output: Research › peer-review › Journal article – Annual report year: 2008

Constitutive equation for polymer networks with phonon fluctuations
Elongational Dynamics of Narrow Molar Mass Distribution Linear and Branched Polystyrene Melts

Measurement of Reversed Extension Flow using the Filament Stretch Rheometer

Optimering af hudklæbere

Physical and chemical properties of dielectric elastomers

Rheology and Adhesive Performance of Soft Polymeric Networks

Kinetic investigation of the addition curing vulcanization
Skov, A. L. 2007 ANNUAL TRANSACTIONS OF THE NORDIC RHEOLOGY SOCIETY. Vol. 15

Dynamic Dilution Effects in Polymeric Networks

Some experimental results for end-linked polydimethylsiloxane network system

Elastic properties of nonstoichiometric reacted PDMS networks

Tailoring Silicone Networks

Projects:

Viscoelastic Response of Double Dynamics Polymer Networks under Transient Elongation
Wang, W., Skov, A. L., Hassager, O. & Huang, Q.
Marie Curie (EU-stipendium)
01/06/2016 → 31/05/2021
Project: PhD
Heavy Duty Coatings
Industrial PhD
01/02/2018 → 31/01/2021
Project: PhD

Structure property relationships in coatings
Samfinansieret - Andet
01/02/2018 → 31/01/2021
Project: PhD

Coating with inherent sensing functionality based on dielectric elastomers
Krpovic, S., Skov, A. L. & Dam-Johansen, K.
Samfinansieret - Andet
01/02/2018 → 31/01/2021
Project: PhD

Study on self-healing and high-permittivity silicone elastomer/keratin composite materials
Liu, X., Skov, A. L., Nie, Y. & Zhang, S.
Stipendie fra udlandet
01/12/2017 → 30/11/2020
Project: PhD

Strechable conductive elastomers
Shao, J., Daugaard, A. E. & Skov, A. L.
Stipendie fra udlandet
01/01/2018 → 31/12/2020
Project: PhD

Advanced wound care adhesives with new functional properties
Chiaula, V., Skov, A. L., Mazurek, P. S., Nielsen, A. C., Tornøe, J. & Tornøe, J.
Industrial PhD
01/08/2017 → 31/07/2020
Project: PhD

Synthesis and characterization of hydrogels to be used as dielectric elastomers
Vaicekauskaite, J., Skov, A. L. & Yu, L.
Forskningsrådssfinansiering
15/07/2017 → 14/07/2020
Project: PhD

Antimicrobial Polymers for Catheter Coatings
Andersen, C., Daugaard, A. E., Madsen, N. J. & Skov, A. L.
Industrial PhD
01/01/2017 → 31/12/2019
Project: PhD

Mechanical and photochemical stabilization of flexible organic solar cells
Ogliani, E., Skov, A. L., Hvilsted, S. & Yu, L.
Samfinansieret - Andet
01/01/2017 → 31/12/2019
Project: PhD

On the correlation between Young’s modulus and melt flow in fiber spinning operations
Samfinansierede - Virksomhed
15/09/2014 → 13/11/2017
Project: PhD

Heat Transfer in dielectric elastomers
Christensen, L. R., Skov, A. L. & Hassager, O.
Samfinansierede - Virksomhed
01/05/2016 → 30/04/2019
Project: PhD

Exploring biochemical process performance limits through topology optimization
Grundforskningsfonden
01/12/2012 → 16/06/2016
Project: PhD

Dielektriske elastomer aktuatorer
Skov, A. L., Hassager, O., Sommer-Larsen, P., Keunings, R. & Ndoni, S.
Forskningsrådsfinansiering
01/08/2001 → 23/08/2004
Project: PhD

DTU-lønnet stipendie
15/07/2007 → 29/09/2010
Project: PhD

Physics of Adhesion
1/3 DTU-stip, 2/3 FUR/andet
15/11/2006 → 17/03/2010
Project: PhD

Synthesis and development of novel coating components for exterior wood applications based on sustainable resources
1/3 DTU-stip, 2/3 FUR/andet
01/08/2012 → 22/02/2016
Project: PhD

Development of new materials for dielectric electroactive polymers as actuators and generators
Madsen, F. B., Skov, A. L., Daugaard, A. E., Hvilsted, S., Kilil, S., Brook, M. A., Graz, I. M., Brook, M. A. & Graz, I. M.
Institut stipendie (DTU) Samf.
15/08/2011 → 26/11/2014
Project: PhD

Stimuli-Adaptable Materials
Institut stipendie (DTU)
01/05/2009 → 21/05/2013
Project: PhD

Development of stimuli-responsive polymer network
Eksternt finansieret virksomhed
01/08/2011 → 17/12/2014
Project: PhD
Novel clay/nanocellulose biocomposite films and coatings in the context of packaging applications
Marie Curie (EU-stipendium)
01/10/2012 → 20/09/2016
Project: PhD

Supramolecular Polymeric Rheology
Shabbir, A., Hassager, O., Skov, A. L., Daugaard, A. E., Creton, C., Ianniruberto, G. & Creton, C.
Marie Curie (EU-stipendium)
01/10/2013 → 14/12/2016
Project: PhD

Synthesis and Evaluation of Structures Lipids based Polyurethanes for Sensors, Actuators and Generators trough Monte Carlo Simulation
Stipendie fra udlandet
15/01/2013 → 26/05/2016
Project: PhD

A chemical approach to avoiding electromechanical instabilities in dielectric electroactive polymer films
Stipendie fra udlandet
01/12/2013 → 15/05/2017
Project: PhD

Molecular Rheology of Complex Fluids
Huang, Q., Hassager, O., Rasmussen, H. K., Skov, A. L., Kontogeorgis, G., Ianniruberto, G. & Vlassopoulos, D.
Marie Curie (EU-stipendium)
01/02/2010 → 19/04/2013
Project: PhD

Mechanically invisible encapsulations
Institut stipendie (DTU) Samf.
15/12/2012 → 14/03/2016
Project: PhD

Loading of micro-cantainers for oral drug delivery
Institut stipendie (DTU) Samf.
01/02/2011 → 14/05/2014
Project: PhD

Microcapsules as delivery vehicles
Institut stipendie (DTU) Samf.
15/09/2013 → 15/03/2017
Project: PhD

Large Scale Processing of dielectric electro active polymers
Offentlig finansiering
01/08/2011 → 30/09/2014
Project: PhD
Mechanical characterization methods for dielectric electroactive polymers
Institut stipendie (DTU) Samf.
01/08/2011 → 26/11/2014
Project: PhD

Monolithic structures and their influence on electromechanical breakdown phenomena
1/3 DTU-stip, 2/3 FUR/andet
01/08/2012 → 03/06/2015
Project: PhD

Extensional Rheology of Model Polymers
1/3 FUU, 1/3 inst 1/3 Andet
01/04/2013 → 16/06/2016
Project: PhD

New Polymer Architectures for Proton Conducting Fuel Cell Membranes
Forskningsrådsfinansiering
01/03/2010 → 21/05/2013
Project: PhD

From Nanostructure to Micro Morphology in Polymers
Institut stipendie (DTU) Samf.
01/04/2008 → 30/11/2011
Project: PhD

Silicone elastomers with aromatic voltage stabilizers
A Razak, A. H. & Skov, A. L.
01/11/2015 → 01/07/2016
Project: Research

Enhancement of dielectric permittivity by incorporating PDMS-PEG multiblock copolymers in silicone elastomers
A Razak, A. H., Skov, A. L. & Szabo, P.
01/01/2014 → 30/11/2015
Project: Research

A soft and conductive PDMS-PEG block copolymer as a compliant electrode for the dielectric elastomer
A Razak, A. H., Skov, A. L. & Madsen, F. B.
01/08/2012 → 31/03/2016
Project: Research

Activities:

Material design and processing – hard competition or great synergy?
Skov, A. L. (Lecturer)
19 Sep 2012
Activity: Talks and presentations › Conference presentations