

SCHOOL OF ENGINEERING AND APPLIED SCIENCE
Ph.D. DEGREE CERTIFICATION

NAME Mr. Tianxiang Su

GRADUATE GROUP Mechanical Engineering and Applied Mechanics

DEGREE DATE August 2011

- 1) Total Course Units 30.5
- 2) Date passed Ph.D. Qualifications Evaluation/Preliminary Examination June 16, 2008
- 3) Date Thesis Proposal/Advanced to Candidacy Approved May 10, 2010
- 4) Date foreign language examination passed (if required) N/A
- 5) Date dissertation defense passed May 27, 2011
- 6) Title of dissertation Entropic Elasticity of Polymers and Their Networks
- 7) Name of Supervisor(s) Dr. Prashant K. Purohit
- 8) Dissertation ready for microfilming? Yes No
- 9) Cumulative GPA 3.0 or above? Yes No
- 10) All I, NR, and F grades cleared? Yes No
- 11) Teaching requirement met if applicable for degree? Yes No
- 12) Seminar presentation requirement fulfilled? Yes No

I certify that the above named student has fulfilled all the requirements for the Ph.D. degree.

Signed

Prashant Kishore Purohit

Dr. Prashant K. Purohit

Signed

Jennifer R. Lukes

Dr. Jennifer R. Lukes, Graduate Group Chair

Reviewed/
Approved

Vijay

Dr. R. Vijay Kumar, Deputy Dean for Education

7/5/11

University of Pennsylvania
Vice Provost for Graduate Education

ACCEPTANCE OF DISSERTATION

Instructions for Administrator: One copy of this form, signed by the Graduate Group Chair, and all members of the Dissertation Committee, must be submitted to SAS Graduate Division Office, 3401 Walnut Street, Suite 322A/6228

Student's Name: Mr. Tianxiang Su

SID#: 73281434

This is to certify that the doctoral dissertation of the student named above was accepted on
Friday, May 27, 2011

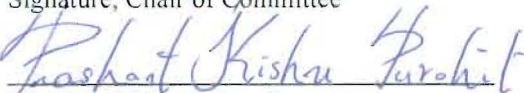
The title of the dissertation is: Entropic Elasticity of Polymers and Their Networks

The dissertation committee and vote:


Signature, Chair of Committee


Dr. Dennis E. Discher
Print Name

0
Yes or No


Signature, Dissertation Supervisor
(if different from Chair)

Dr. Prashant K. Purohit
Print Name

Yes
Yes or No


Signature, Committee Member

Dr. Pedro Ponte Castañeda
Print Name

YES
Yes or No


Signature, Committee Member

Dr. John L. Bassani
Print Name

Yes
Yes or No

Signature, Committee Member

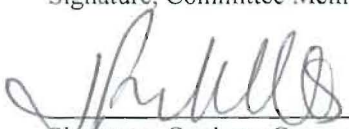
Print Name

Yes or No

Signature, Committee Member

Print Name

Yes or No


Signature, Graduate Group Chair
Dr. Jennifer R. Lukes


7/5/11
Date

CERTIFICATION OF DISSERTATION

Instructions for Administrator: One copy of this form, signed by the Graduate Group Chair, needs to be included with the copies of the Ph.D. dissertation deposited in the Graduate Division Office, 3401 Walnut Street, Suite 322A /6228

This is to certify that the accompanying copies of the doctoral dissertation of
Mr. Tianxiang Su

are completed and correct copies as approved by the Dissertation Committee and are in satisfactory form for microfilming.



Graduate Group Chair

Date

Dr. Jennifer R. Lukes

ENTROPIC ELASTICITY OF POLYMERS AND THEIR NETWORKS

Tianxiang Su

A DISSERTATION

in

Mechanical Engineering and Applied Mechanics

Presented to the Faculties of the University of Pennsylvania

in

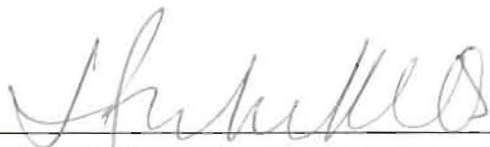
Partial Fulfillment of the Requirements for the

Degree of Doctor of Philosophy

2011



Assistant Professor Prashant K. Purohit
Department of Mechanical Engineering and Applied Mechanics
Supervisor of Dissertation



Associate Professor Jennifer R. Lukes
Department of Mechanical Engineering and Applied Mechanics
Graduate Group Chairperson

Dissertation Committee:

Professor John L. Bassani, Department of Mechanical Engineering and Applied Mechanics
Professor Pedro Ponte Castañeda, Department of Mechanical Engineering and Applied
Mechanics
Professor Dennis E. Discher, Chemical and Biomolecular Engineering Department