

STRATEGIC PLAN

Department of Coatings and Polymeric Materials

September 15, 2016

DEPARTMENT MISSION

To be the world leader in education and research on the science of polymer coatings and related materials

STUDENT SUCCESS AND LEARNING

Objective: Increase graduate student enrollment

Metric: 1. Establish new professional master's program; launch date Fall 2017

2. Increase enrollment in PhD program

Strategy	Tasks	Metric	Responsibility
Create professional master's program in Color Technology	Develop fundraising plan to raise additional external funds needed to support launch of program	Sufficient funds are raised	Chair
	Hire Professor of Practice with experience in Color Technology (in addition to tenure-track faculty)	Professor of Practice is hired	Chair
	Develop curriculum and obtain approval for program	Program is approved	Chair and consultant
Increase enrollment in PhD program	Increase number of tenure-track research active faculty to 7	New faculty are hired	Chair
Maintain the necessary diversity of faculty expertise to carry out educational program.	Make hires that ensure that critical areas of the curriculum are represented.	Combined expertise of the faculty is suitable to cover the necessary curriculum	Chair

Objective: Reduce time to degree and attrition rates for graduate programs and improve placements for doctoral students

Metric: Maintain average time to degree for doctoral students to under 5.0 years

Strategy	Tasks	Metric	Responsibility
Maintain current average time to degree for doctoral students	Ensure students are completing tasks on time	Average doctoral student time to degree completion 5 years or less (at NDSU).	Faculty
Maintain current 100% placement rate for doctoral students	Continue relationships with companies in polymer and coatings industry via IAB meetings, joint projects, presence at trade shows.	Placement rate is 100% within 6 months of completion.	Chair/Faculty

Objective: Strategically increase undergraduate student enrollment

Metric: Increase enrollment in CPM minor(s) by at least 25% by Fall 2018

Strategy	Tasks	Metric	Responsibility
Increase recruiting effort of NDSU students into the CPM minor	<ul style="list-style-type: none"> • Continue presentations in 189 classes • Identify events to hold for prospective students in sophomore year • Develop new brochure 	Increase in enrollment in minor	Chair
Establish a new minor in Color Technology	Develop curriculum and obtain approval for program	Program is approved	Chair
Identify ways to co-recruit high school students into NDSU/CPM	Work with undergraduate recruiters in major departments (C&B, ME)	Increase in enrollment	Chair

Reduce barriers to students enrolling in CPM minor	Change prerequisite for Coatings I and Polymer Synthesis courses to Chem 240 (Organic survey)	Increase in enrollment	Chair
Improve communication with students in CPM minor(s)	Schedule events for students enrolled in the minor	Increase in enrollment	Chair

OUTREACH AND ENGAGEMENT

Objective: Improve communication with citizens of North Dakota

Metric: Number of points of communication with North Dakota citizens will be at least one per year

Strategy	Tasks	Metric	Responsibility
Identify means to fund project requests originating from ND citizens and companies	Work with extension service, DoC	Funds identified	Chair
Promote CPM research in local news outlets	Identify newsworthy accomplishments and work with University Relations to develop press strategy	1-2 Press releases per year	Chair
Hold public outreach activities out in the community	Identify opportunities for public events	One public event each year	Chair/Faculty

Objective: When appropriate, tie research mission to needs of North Dakota

Metric: Add at least one new partner company each year.

Strategy	Tasks	Metric	Responsibility
Provide testing services to ND companies	Update brochure and website on services offered.	Continued requests for testing from ND companies	Chair/Lab Manager

Engage ND companies in research efforts	<ul style="list-style-type: none"> Identify companies with mutual research interests. Write joint proposals for project funding using Research ND or SBIR approaches. 	Increase in number of projects with ND companies	Chair/Faculty
Identify additional research opportunities and partnerships of interest to North Dakota needs.	Continue to seek opportunities for collaborations and funding.	Increase in additional projects with ND partners	Faculty

Objective: Increase the educational reach of North Dakota

Metric: Addition of distance professional master's program

Strategy	Tasks	Metric	Responsibility
Explore opportunities for an online professional master's program in Coatings Science	Identify market and conduct market analysis	Market analysis complete	Chair

RESEARCH AND DISCOVERY

Objective: Increase research strength in focused areas of excellence

Metric: Number of new hires in Grand Challenges; Number of PhD degrees in Grand Challenge areas

Strategy	Tasks	Metric	Responsibility
CPM participation depends on outcome of grand challenge proposal			

Objective: Increase national prominence of NDSU as a research university

Metric: Faculty invitations for keynote and plenary lectures, especially internationally; faculty participating in leadership roles in societies; faculty winning national level, prestigious awards.

Strategy	Tasks	Metric	Responsibility
Proactively pursue nomination of department faculty for national awards	Identify opportunities and coordinate nominations	Number of nominations submitted	Chair
Serve in organizational or leadership positions in scientific societies	Identify opportunities and engage with appropriate people	Number of positions held	Faculty
Maintain publication productivity in high quality journals	Submit papers to the highest quality journals	Peer-reviewed publications per faculty	Faculty
Develop external seminar series	Set aside funds for 3-4 external speakers per year	Number of external seminar speakers	Chair/Faculty

Objective: Increase NDSU's research capacity

Metric: Increase dollar value of proposals submitted by at least 20% over the next 5 years.

Strategy	Tasks	Metric	Responsibility
Increase \$ amount of submitted proposals	Continuously identify opportunities for grant funding	Value of proposals submitted	Faculty
Faculty participate in large multidisciplinary proposals	Identify opportunities and develop relationships	Number of collaborative proposals submitted	Faculty
Increase funding in collaboration with private sector partners	Develop partnerships with key companies in ND and nationally	Number of proposals to/with private sector partners	Faculty
Increase research-active tenure track faculty to 7	Conduct hiring process of two currently open positions	Complete hiring process	Chair
Research productivity continues to grow year over year.	Seek to hire highly qualified and productive faculty members.	Number of research active tenure track faculty in department is sufficient to engender constant growth in research.	Chair

Objective: Improve campus climate

Metric: Maintain and improve collegiality among CPM faculty, staff, and students

Strategy	Tasks	Metric	Responsibility
Effectively communicate department issues to faculty, staff, and graduate students	Use a combination of mechanisms to communicate in the department such as listserv, Sharepoint, meetings, seminars, etc.	Department Sharepoint site is fully operational by May 2016.	Chair
Develop informal get-togethers among faculty as well as faculty and graduate students	Identify opportunities and venues	3-4 Events held each year	Chair
Seek to obtain a diverse pool of applicants for the graduate program and faculty hires	Advertise faculty openings broadly; seek URM and woman applicants via personal contacts. Work with graduate school to recruit students from TCs and HBCUs.	Obtain data from IRA.	Chair