



**MISSOURI
CHAPTER**



American Concrete Institute

2015–2016 Honorary

Abdeldjelil “DJ” Belarbi

Graduate Scholarship

PURPOSE: To honor long-time ACI Missouri member and Missouri S&T faculty Dr. DJ Belarbi by promoting the development of future engineers, contractors and architects the ACI Missouri Chapter has established the Honorary DJ Belarbi Graduate Scholarship Award. The annual award will provide financial assistance for graduate students pursuing a course of study in the field of concrete design, materials, or construction.

ELIGIBILITY: To receive consideration, a student must be currently enrolled or accepted into a graduate program at an institution located within the boundaries of the ACI Missouri Chapter with a course of study related to concrete materials, design, or construction. During the award year, the student should be enrolled in at least three academic credits per semester/quarter.

CRITERIA: The following criteria must be met by the applicant prior to receiving the award but not necessarily at the time of application:

1. Possess a bachelor's degree from a higher education institution.
2. Be accepted or currently enrolled for graduate study at a college or university in a program in the area of concrete where design, materials, construction are offered.
3. Maintain status as a full time student during the entire scholarship year.

SUBMISSION: A completed, typewritten application package must be received by the Student Activities Committee, Missouri ACI Chapter by 5pm **Friday, March 6th**. The package shall include the following:

- a. Complete application form (attached below).
- b. Undergraduate and graduate transcripts. An unofficial transcript from your current institution is sufficient if it shows all credit from other institutions you have attended.
- c. Letter of enrollment or acceptance in a graduate program from an institution located within the ACI Missouri Chapter district.
- d. Two letters of recommendation addressing potential for growth, character, leadership capacity, and career interest. One should be from a faculty member. Recommendations must be submitted directly to the ACI Missouri Chapter.

SELECTION OF AWARD RECIPIENTS: Upon receipt of all applications by the deadline of 5pm, **Friday, March 6th**, the Student Activities Committee shall review the applications. Those applicants who have satisfactorily completed the application will be considered for the award by a three-member, ad-hoc Committee, approved by the board of directors and chaired by the past president of ACI, Missouri Chapter. **Selection is based upon academic achievement and awards, relevant experience, quality of application including writing skills, and displayed interest in concrete.**

NUMBER, AMOUNT AND PAYMENT OF AWARD: The ACI Chapter will present up to two (2) \$2500 scholarship awards. Awards will be announced at the annual meeting of the ACI Missouri Chapter held in conjunction with the Missouri Concrete Conference in Rolla, MO at noon on March 31st, 2015. All winners and their advisors will receive complementary tickets to this meeting and are encouraged to attend. Payment will be made in two installments at the beginning of Fall and Winter semesters of the award year. If the student fails to provide

proof of registration for graduate study for each of those semesters, the award will be forfeited.

APPLICATION

Due: Friday, March 6th , 2015

AMERICAN CONCRETE INSTITUTE – MISSOURI CHAPTER GRADUATE SCHOLARSHIP AWARD

PERSONAL INFORMATION

NAME: Ryan Holmes	
ADDRESS: PO Box 28571 Kansas City Missouri 64188	
TELEPHONE: 816-726-8624	EMAIL Rh8qd@mail.umkc.edu

HIGHER EDUCATION

INSTITUTION	DATES AT-TENDED	CREDIT HOURS	DEGREES AWARDED AND DATE
University of Tulsa	8/07-12/07	16	
Penn Valley Community Coll	1/08-1/09	20	
University of Missouri Kansas City	1/10-12/14	100	Bachelors of Science, Civil Engineering

GRADUATE STUDY

Institution: University of Missouri Kansas City	Location: Kansas City Missouri	
Date of Admission: 8/1/2014	Period of Study: 8/1/2014-05/15/2016	
Degree Expected: Masters of Science	Major Materials	Minor
Previous MO-ACI graduate scholarship? Yes ☐ , No ☒ If yes, when?:		

1. **What reasons do you believe support your application for this award? (Financial need is not an important criterion.)**

As a student of science and engineering, I have worked hard to maintain an above average GPA as well as perform research with several different groups at a variety of universities. As an undergraduate, some of the opportunities I have been able to participate with were the development of a novel bone cement at the UMKC Dental School, modeling the stress/strain distributions of lead-core rubber bearings used for seismic energy dissipation in bridges through the NEES (NSF)-Research experience for Undergraduates at the University of Nevada-Reno, and water-soil-structure interface boundary conditions through the hydraulics and structural side of the UMKC civil engineering department (home university). These experiences stand as testament of my hard work, past successes in research, and personal development.

- 2. What is your background in the field of concrete? Of particular interest is your experience in design, materials, construction, and/or research. Include a summary of your work experience and accomplishments.**

Pervious concrete is the area of research I am working towards and therefore most of my classes are focused on composition, analytical methods, societal impact, and applications of concrete. Some of those classes include Advanced Portland Cement, Green Buildings, Earthen Structures and Seepage, Advanced Pavement Design, and Fundamentals of Geomaterial Characterization. These previous classes have supported understanding the driving principles and mechanisms of concrete from an academic perspective. On the application side, this past summer was spent at the construction site of a refinery in Ecuador. Concrete quality assurance on site and strength testing at the lab were part of the internship and gave insight into some of the everyday application of engineering judgment during placement and environmental influences on quality.

- 3. What is your plan for continuing your education? What goals have you established for your education?**

The current goals are to finish with a master's degree within the next year and then begin working for an international company originating in the United States but serving overseas. This would provide the opportunity to work in the field and apply the academic skills while learning the practical and typical methods expected for real world projects.

- 4. What specific work relating to concrete, such as design, materials, construction, or research, will you pursue during your graduate work?**

The current research project includes using pervious concrete in a novel way which will require significant amounts of planning and designing. In this moment, bench scale testing has validated the proof of concept and progressive scaling the model will hopefully avoid unforeseeable pitfalls that often arise in exploring new techniques and applications. For this year's next steps a full scale testing of this pervious concrete will be require a rigorous design including stress distributions, porosity, longevity, cost, construction methodology and seismic modeling will be required.

5. What will your program of study be during the year of this award? (List coursework and research)

This following year will have two focuses throughout the duration of both semesters. The first semester will have the following classes: Scanning Electron Microscopy; Durability of Construction Materials; Pavement Materials, Design, Maintenance, and Rehabilitation. Concurrently with the coursework for that semester, design and preparation for full scale testing will occur. The subsequent and final semester of the Master's program will not have any specific courses as it will remain open to perform full scale testing, sampling, testing, and analysis of data. This will culminate in the thesis of the project and several journals outlining the results for peer review.

REFERENCES

List the names of two people from whom you have requested recommendations be emailed or mailed to the ACI-MO Chapter at the address below.

NAME	TITLE	EMPLOYER	ADDRESS
Dr. Megan Hart	Professor	University of Missouri KC	5110 Rockhill Road Kansas City, MO 64110
Dr. John Kevern	Professor	University of Missouri KC	5110 Rockhill Road Kansas City, MO 64110

I certify that the information contained in this application is true and that I have answered all of the questions to the best of my ability. I agree that I will notify the ACI Missouri Chapter immediately when my educational program is interrupted or changed in any manner that may jeopardize the intent of the award. I further agree that I will accept the award only as long as I successfully pursue the graduate study program I have described above and for which the reward was made.

Signature: _____ Ryan Holmes _____ Date: _____ 2/26/2015 _____

RETURN COMPLETED APPLICATION PACKAGE BY FRIDAY, MARCH 6TH, 2015 TO dane.shaw@jacobs.com (PREFERED SUBMISSION METHOD)

or

**Dane M. Shaw
Jacobs Engineering
501 N. Broadway
Saint Louis, MO 63102**

Applicants are encouraged to submit applications electronically. Please make every attempt to submit in one email. Letters of reference should be sent directly either electronically or by mail.

SS University of Missouri - Kansas City
Unofficial Academic Record

Date: 08-FEB-2015

Name: Holmes,Ryan Rodrick
ID: 08386383
Date of Birth: 10/25/XXXX

Degrees Awarded:

University of Missouri - Kansas City
Civil Engineering BSCE 12-13-2013
(Magna Cum Laude)
Penn Valley Community College
AA 05-2007

North Kansas City High School (96/ 450 79%)
High School Transcript Type: HS08

Bio-Demographic & Miscellaneous Information

Permanent Address as of 09/03/2009:
7238 N Myrtle Ave
Gladstone, MO 64119-1972
(816) 726-8624

GPA Disclaimer

"Non-UM System" transfer credit does not figure into
overall GPA. Grades are only displayed on the
profile to aid in advising purposes.

FALL 2007 University of Tulsa

Chem	1011	General Chemistry I Lab	C	1.0
Chem	1013	General Chemistry I	B	3.0
Engl	1033	Exposition & Argument	A	3.0
Math	2024	Calculus II	B	4.0
Phys	1001	The World of Physics	B	1.0
Phys	2051	General Physics I Lab	A	1.0
Phys	2053	General Physics I	B	3.0

SPNG 2008 Penn Valley Community College

Engr	223	Thermodynms&Heat Transf	B	4.0
Geol	101	Physical Geology	A	5.0
Psyc	140	General Psychology	B	3.0

FALL 2008 Penn Valley Community College

Hist	133	Foundations of Western Civ	A	3.0
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SPNG 2009 Penn Valley Community College

Math	115	Statistics	B	3.0
Musi	107	Fundamentals of Music	C	3.0

SPNG 2010 Local Campus Credits Ugrd Cv-Engr-BS

Civ Engr	275	Engineering Statics	B+	3.0
Civ Engr	320	Intro to Factorial Design	B-	1.0
English	225	Eng II:Inter Acad Prose	A-	3.0
Mec Engr	130	Engineering Graphics	C+	3.0

	Hrs Att	Hrs Ern	Qual Pts	GPA
UGRD Term:	10.0	10.0	30.60	3.060
UGRD CUM:	10.0	47.0	30.60	3.060

05/12/2010 Good Standing --

FALL 2010 Penn Valley Community College

Math	230	Differential Equations	A	3.0
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FALL 2010 Local Campus Credits Ugrd Cv-Engr-BS

SS University of Missouri - Kansas City
Unofficial Academic Record

Math	250	Calculus III	B	4.0
Mec Engr	285	Engineering Dynamics	A	3.0
Physics	250	Phys Sci & Engr II	A-	5.0
	Hrs Att	Hrs Ern	Qual Pts	GPA
UGRD Term:	12.0	12.0	42.50	3.542
UGRD CUM:	22.0	62.0	73.10	3.323

12/23/2010 Good Standing --

SPNG 2011	Local Campus Credits	Ugrd	Cv-Engr-BS	
Civ Engr	276	Strength of Materials	A	3.0
Comm St	110	Fun of Effect Sp & List	B+	3.0
Mec Engr	220	Electric Circuits	B	3.0
	Hrs Att	Hrs Ern	Qual Pts	GPA
UGRD Term:	9.0	9.0	30.90	3.433
UGRD CUM:	31.0	71.0	104.00	3.355

05/12/2011 Good Standing --

SUM 2011	Penn Valley Community College			
Mate	111A	Spec'l Prob & Proj Manual Mill	A	1.0 A
Mate	111A	Spec'l Prob & Proj Manual Lathe	A	1.0 A
Mate	111A	Spec'l Prob & Proj Mach Shop Sa	A	1.0 A

FALL 2011	Local Campus Credits	Ugrd	Cv-Engr-BS	
Civ Engr	321	Structural Analysis I	A	4.0
Civ Engr	351	Fluid Mechanics	A	3.0
Englsh	323	Shakespeare	A	3.0
	Hrs Att	Hrs Ern	Qual Pts	GPA
UGRD Term:	10.0	10.0	40.00	4.000
UGRD CUM:	41.0	81.0	144.00	3.512

12/22/2011 Good Standing --

SPNG 2012	Local Campus Credits	Ugrd	Cv-Engr-BS	
Civ Engr	211	The Engineering Enterp	A	3.0
Civ Engr	357	Engineering Hydraulics	A	3.0 *
Civ Engr	378WI	Civil Eng Materials	A	3.0
Civ Engr	400	Problems	A	3.0
Civ Engr	421	Matrix Meth-Strct Anlys	A	3.0
	Hrs Att	Hrs Ern	Qual Pts	GPA
UGRD Term:	15.0	15.0	60.00	4.000
UGRD CUM:	56.0	96.0	204.00	3.643

05/10/2012 Good Standing --

SUM 2012	Local Campus Credits	Ugrd	Cv-Engr-BS	
Mec Engr	219	Comp Prog for Engineers	A	3.0
	Hrs Att	Hrs Ern	Qual Pts	GPA
UGRD Term:	3.0	3.0	12.00	4.000
UGRD CUM:	59.0	99.0	216.00	3.661

08/02/2012 Good Standing --

FALL 2012	Local Campus Credits	Ugrd	Cv-Engr-BS	
Civ Engr	311	The Tech Entrepreneur	A	3.0
Civ Engr	335	Soil Mechanics	B+	3.0
Civ Engr	411	Cvl Engrng Systems Dsgn	A-	2.0
Civ Engr	481	Highway and Traffic Eng	B	3.0
Pol Sci	210	American Government	A	3.0
Dean's List				
	Hrs Att	Hrs Ern	Qual Pts	GPA
UGRD Term:	14.0	14.0	50.30	3.593
UGRD CUM:	73.0	113.0	266.30	3.648

12/20/2012 Good Standing --

SPNG 2013 University of Kansas Main Campus

SS University of Missouri - Kansas City
Unofficial Academic Record

Ce 562 Design of Steel Structures B 3.0

SPNG 2013 Local Campus Credits Ugrd Cv-Engr-BS
Civ Engr 342 Water/Wastewater Trtmnt A- 3.0
Civ Engr 412 Civil Eng Sys Des II A 3.0
Civ Engr 453 Hyd & Variability Rivers A 3.0
Hrs Att Hrs Ern Qual Pts GPA
UGRD Term: 9.0 9.0 35.10 3.900
UGRD CUM: 82.0 125.0 301.40 3.676

05/17/2013 Good Standing --

FALL 2013 Local Campus Credits Ugrd Cv-Engr-BS
Civ Engr 401GS Topics in Civil Engineering A 3.0
- GIS for Sci/ Engineers
Civ Engr 422WI Reinforced Concrete Des B 3.0
Civ Engr 452 Hydraulics - Open Chanls A 3.0
Civ Engr 497 Engineering Hydrology A 3.0
Math 300 Linear Algebra I A- 3.0
Dean's List
Hrs Att Hrs Ern Qual Pts GPA
UGRD Term: 15.0 15.0 56.10 3.740
UGRD CUM: 97.0 140.0 357.50 3.686

12/20/2013 Good Standing --

FALL 2014 Local Campus Credits Grad Cv-Engr-MS
Civ Engr 5531 Fund of Geomaterial Charact A 3.0
Civ Engr 5547 Contracts/Law for Engineers A- 3.0
Mec Engr 5572 Advanced Statistics A 3.0
Hrs Att Hrs Ern Qual Pts GPA
GRAD Term: 9.0 9.0 35.10 3.900
GRAD CUM: 9.0 9.0 35.10 3.900

12/25/2014 Good Standing --

SPNG 2015 Local Campus Credits Grad Cv-Engr-MS
Civ Engr 5501ES Adv Topice Civ Engr IP 3.0
- Earthern Struct/Seep
Civ Engr 5566 Green Bldg/Sustain Infrastr IP 3.0
Civ Engr 5571 Adv Portland Cement Concrete IP 3.0

American CollegeTest for Kcity
01 KACT COMP Composite (SCH) 28 10/01/2006
02 KACT ENGL English (SCH) 25 10/01/2006
03 KACT MATH Math (SCH) 27 10/01/2006
04 KACT READ Reading (SCH) 30 10/01/2006
05 KACT SCIRE Science Reasoning (SCH) 30 10/01/2006

ETS Proficiency Profile
06 TAP TOTAL Total (E) 460 03/23/2012

English Proficiency Test
07 WEPT WEPT English Proficiency Test (E) P 09/21/2011
Hrs Att Hrs Ern Qual Pts GPA
UGRD CUM: 97.0 140.0 357.50 3.686

2300 Dulles Station Blvd., Suite 300, Herndon, Virginia 20171
PH (703) 742-4200 FX (703) 742-4239
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