

# Remembering Jamilur Reza Choudhury

*A tribute to a visionary*

MAMNOON MURSHED CHOWDHURY

There was every reason for Jamilur Reza Choudhury not to return to the Dacca of 1968 after completing his PhD at the University of Southampton, UK. It was not the best of times being a Bengali in the state called Pakistan, especially when racial identity prevailed over academic brilliance. By then, he had proven his academic genius and had been told about all the opportunities that awaited him if only he wanted the world to be the stage. But he chose the road less travelled by and, as he used to say, it was not a difficult decision.

Prior to his post-graduation studies in UK, he had received education mostly at government institutions almost at no expense and he thought it was time to give something back. He kept on doing that till the last day of his life. When JRC, as he was reverently and fondly known to everyone, passed away on April 28, 2020, it was the departure of the most luminous star in the firmament of science and engineering in Bangladesh.

But JRC was much more than an engineering genius to the nation. He epitomised what the people of this country earnestly looked for among its leaders and intellectuals—he was a man of highest personal integrity. It is therefore hardly surprising that he was a most sought after person to lead and be part of activities that hardly had any relation to his professional expertise. This was only because of his impeccable credentials of honesty and unquestioned moral rectitude.

As the chairperson of Bangladesh

Poribesh Andolon (BAPA) from 2001 to 2006, he led the environmental activism to protect the rivers and water bodies of the country with vigour and unflinching courage. Till his death, he was serving as the chairperson of the Bangladesh chapter of People's Saarc Water Forum. Among the numerous organisations that he associated himself with dedication and care was the renowned Diabetic Association of Bangladesh, of which he was the vice president.

Within his own field of structural engineering, JRC had probably contributed to almost every one of Bangladesh's recent mega infrastructural projects. From the Bangabandhu Bridge over Jamuna to the ongoing engineering tour de force Padma Bridge, he had led the technical panel of experts with vision and innovation. Development projects like Karnaphuli underwater tunnel in Chattogram and the Dhaka elevated expressway, that have far reaching impacts on the future shape of these cities, had been progressing steadily under his stewardship. At the age of 77 and up to the time of his unexpected demise, JRC was as active as he had been in his youth.

From the day when a young JRC was first exposed to the use of computers during post-graduate studies in UK, the idea of information technology's capability of transforming a society remained with him. To transform the ideas into action, he pioneered the establishment of Bangladesh's first computer centre in Buet and remained associated with it for a decade. Just as he had earlier identified the priorities



Professor Jamilur Reza Choudhury (November 15, 1943 – April 28, 2020).

PHOTO: PROTHOM ALO

of the newly liberated Bangladesh, JRC realised that with the advent of the new millennium, he should focus on the nation's future that depended on digitisation and information technology. He played instrumental roles in IT policy making bodies in government, including serving as the convener of Committee for Formulation of IT Policy for Bangladesh and as a member of the Prime Minister's Task Force on developing Digital Bangladesh.

JRC envisioned a knowledge based society in Bangladesh. He had always been a believer in the talents of Bangladeshi youth and together with equally zealous and likeminded band

of enthusiasts, he had been leading the Bangladesh Mathematical Olympiad in identifying geniuses from schools and colleges from locations all around the country. In one of the gatherings of BMO, he once declared his belief of a Bangladeshi winning a Nobel in the field of science within 2030.

It is interesting to note that JRC, through his own life and activities, deconstructed the stereotypical social perception of a genius. In their book *The Genius Famine* (2016), authors Charlton and Dutton concluded that geniuses seldom fit into normal society and they seldom want to. JRC was an exception. With confidence and self assurance, he had been actively

interacting and contributing to so many segments of the society and it made him among the most socially connected intellectuals of contemporary Bangladesh. This attribute was perhaps acquired during the early part of his life, where due to his father's job postings, he was exposed to people of diverse culture and backgrounds. For him, the discourse of knowledge was as much about the people as they were about ideas.

If anything equalled JRC's erudition, it was his humility and compassion. He could be approached by the youngest of his students and he dedicated his precious time addressing their queries. His relatives were amazed by his habit of enquiring about everyone's well being throughout the year. Even being the busy person that he was, he would visit or call the children of his deceased school friends every once in a while and reassure them. He was the first person to share the success stories of his students in social media, just as he was in condoling the passing away of an old colleague or alumni. In October 2019, when Abrar Fahad was brutally murdered in Buet campus, JRC went back to his alma mater to lead the calls for restoring dignity of life in the campus.

April, as Eliot wrote in "The Wasteland", is the cruellest month. In a country where shortage of persons of integrity has never been as acute as now, Jamilur Reza Choudhury's sudden departure created a gaping void that will be hardest fill.

Mamnoon Murshed Chowdhury is an architect who graduated from Buet and a visiting faculty at the University of Asia Pacific.

## Efficacy of the home-made mask



IN OTHER WORDS

AMITAVA KAR

The recent back-and-forth debate over the use of face masks to prevent the spread of covid-19 has settled. In the beginning, the World Health Organisation

(WHO) said that there was no need for people who are well to wear face masks. Countries such as the US, the UK, much of Europe, Australia, New Zealand, India, South Africa and Singapore adopted this policy. They emphasised frequent hand-washing and physical distancing, and the need to save available masks for healthcare workers.

All that changed in early April when the US and Singapore switched to advising people to wear masks as they leave home. The WHO also made a U-turn. Dr Mike Ryan, executive director of WHO's health emergencies programme, said, "We can certainly see circumstances on which the use of masks, both home-made and cloth masks, at the community level may help with an overall comprehensive response to this disease."

Now, a noted Bangladeshi-American scientist is saying that home-made masks can be even better than medical masks. "We just published a study ["Performance of fabrics for home-made masks against spread of respiratory infection through droplets: a quantitative mechanistic study" (has not been peer reviewed)] on the efficacy of home fabrics in blocking droplets that are released during coughing sneezing and speaking," says Dr Taher M Saif on email.

Dr Saif is the Gutsell professor of

Mechanical Science and Engineering at the University of Illinois at Urbana-Champaign whose research interests are Molecular, Cellular and Tissue Engineering. In 2015, he was the principal investigator of a scientific project that created the first bio-robot ("A living machine", *The Daily Star*, September 26, 2014) capable of revolutionising medical science.

What makes home-made masks better? Professor Saif says, "In the case of the coronavirus, droplets

spread from symptomatic as well as pre-symptomatic and asymptomatic infected individuals. A healthy individual can get infected by inhaling virus loaded droplets. We find that masks made of 2-layered T-shirts are better than medical masks both in terms of droplet blocking efficiency and in breathability. Home-made, 2-layer masks ensure more air flow through the mask cloth and less through the sides. There is not much benefit in using 3 layers. In fact 3-layer masks

lower breathability and forces more air through sides, increasing the risk of infection."

How did they arrive at this conclusion? "We examined the performance of ten different fabrics, ranging from cotton to silk, in blocking high velocity droplets (as released during coughing and sneezing), using a 3-layered commercial medical mask as a benchmark. We also assessed their breathability and ability to soak water. We believe that the materials should

be as breathable as possible, without compromising blocking efficiency, to reduce air flow through the sides of the mask since such flow would defeat the purpose of the mask. We found that most home fabrics substantially block droplets, even as a single layer. With two layers, blocking performance can reach that of surgical masks without significantly compromising breathability."

What is the fundamental difference between the ways they work? Professor Saif says, "We found out that home fabrics are hydrophilic to varying degrees, and hence soak water. In contrast, medical masks are hydrophobic, and tend to repel water. Incoming droplets are thus soaked and 'held back' by home fabrics, which might offer an as of yet untapped and understudied advantage of home-made cloth masks. Overall, our study suggests that most double-layered cloth face coverings may help reduce droplet transmission of respiratory infections."

Like in many countries, medical masks are in short supply in Bangladesh. They are to be reserved for frontline workers in healthcare and other areas. Professor Saif says, "Bangladesh is still at the early stage of Covid-19. Home-made masks might be the only protection people can have. This might have a significant effect on the fate of the country. Media can play a critical role here by informing the public."

Recently, the US Centers for Disease Control and Prevention (CDC) also has recommended home-made cloth face masks for use by the general public in areas of significant community-based transmission.

We have to use everything we have to fight this virus. A virus does not have creativity. We do.

PHOTO: THOMAS COEZ/AFP

Amitava Kar is a mechanical engineer.



Some governments have urged the public not to wear masks in order to ensure enough supplies for healthcare workers.

**QUOTABLE Quote**

**HENRY WADSWORTH LONGFELLOW**  
(1807-1882) American poet

*It takes less time to do a thing right, than it does to explain why you did it wrong.*

**CROSSWORD BY THOMAS JOSEPH**

**ACROSS**

- 1 Easy runs
- 6 Dominant
- 11 Showy display
- 12 Less bright
- 13 Intent look
- 14 "Pal Joey" writer
- 15 Utter
- 16 Make mistakes
- 18 Sweet tuber
- 19 Genesis name
- 20 Rent out
- 21 Quarter-back Manning
- 22 Sight from Yemen
- 24 Says further
- 25 Agony
- 27 Paul's collaborator
- 29 Flower part

**DOWN**

- 1 Inferior
- 2 Musical range
- 3 Went with the likeliest case
- 4 Lobed organ
- 32 Binary digit
- 33 PC key
- 34 "Evil Woman" band
- 35 Old roadster
- 36 Fire remnant
- 37 Dieter's no-no
- 38 Pranks
- 40 Take on
- 42 Mix up
- 43 Lasso loop
- 44 Said with a twang
- 45 Like some floors
- 5 Pittsburgh player
- 6 Left at sea
- 7 -- di-dah
- 8 Behaved comically
- 9 Harbinger
- 10 Friend of d'Artagnan
- 17 Stockpile again
- 23 Heir, often
- 24 Little laborer
- 26 Charm
- 27 Syria neighbor
- 28 New York tribe
- 30 Go by
- 31 Broke down
- 33 Canvas holder
- 39 Suffix with pay or play
- 41 "How -- love thee?"

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**YESTERDAY'S ANSWERS**

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
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**BEETLE BAILEY BY MORT WALKER**

WHAT'S SARGE DOING? TEXTING COOKIE

THEY SET UP A REMOTE DELIVERY SYSTEM

**BABY BLUES BY KIRKMAN & SCOTT**

SOMETIMES IT FEELS LIKE I'M MISSING OUT ON OUR KIDS' LIVES. HOW SO?

WELL, FOR EXAMPLE, I DIDN'T KNOW THAT THE STINKBUG WAS HAMMIE'S SPIRIT ANIMAL.

AND YOU'RE SEEKING MORE OF THIS EXCITING INFORMATION? YOU KNOW WHAT I MEAN!