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SUPERHERO SCIENCE AND TECHNOLOGY: A NEW OPEN ACCESS JOURNAL

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I am delighted to announce the launch of the new open access journal *Superhero Science and Technology*. This journal is published on the Delft University of Technology (TU Delft) platform for Open Journal Systems. The primary aim of the journal *Superhero Science and Technology* is to publish research in the fields of science, engineering, technology and ethics that is motivated by the superhero genre and written in manner that it is accessible to both the academic community and the general public.

Inspired by the source materials of comic book publishers such as Marvel and DC, the superhero genre has evolved into one of the most popular genres in modern cinema. In many cases the comic book stories predate the films by decades. For example, the first Superman comic book was published in 1938 [1] while the first live action Superman film was released in 1978 [2]. After the Superman and Batman films of the 80s and 90s, the start of the modern superhero genre can be traced back to films such as *X-Men* (2000) [3], *Spider-Man* (2002) [4], *Daredevil* (2003) [5] and *Hulk* (2003) [6]. One measure of the popularity of superhero films is their earnings at the box office. For instance, the Christopher Nolan-directed Batman trilogy of *Batman Begins* (2005) [7], *The Dark Knight* (2008) [8] and *The Dark Knight Rises* (2012) [9] earned just under \$2.5 billion at the box office. As of February 2018, the Marvel Cinematic Universe (MCU) has grossed more than \$14 billion from an initial investment of just over \$3 billion.

Due to the worldwide recognition of the superhero film genre and prominence of the films and associated comic book literature in modern culture, the superhero genre offers a unique platform for scientists to communicate and promote their

research [10-12]. As a researcher it is imperative to communicate research progress in the form of conference presentations, conference proceedings or publications in peer-reviewed journals. This approach represents the traditional academic model for the dissemination of new research. However, this method typically omits the non-scientist or those outside the academic sphere. Given that most researchers are reliant on the funding received from national and international organisations and that a large portion of this funding comes from public taxation systems, we, as active researchers, have an obligation to inform the general public in an accessible manner on the relevance and importance of our research to modern society and the evolution of our world. By connecting research to popular culture elements from the superhero genre such as superheroes, supervillains, superpowers, scenes from films or the comic book literature, researchers can engage the general public in their work using a unique approach. *Superhero Science and Technology* provides the researcher with the opportunity to write a scientific publication in a language that is accessible to both their academic peers and members of the general public.

Superhero Science and Technology is a fully open-access, peer-reviewed online journal. As a fully open-access journal there are no costs for authors to publish and no costs for the reader. Once accepted for publication all articles are made freely available online via the journal website. This ensures that publications can be circulated to the widest possible audience covering both the academic and non-academic communities. In addition, the authors retain copyright for their work.

Given that *Superhero Science and Technology* aims to reach both academics and non-academics, it is imperative that authors write their articles using accessible language. Authors are advised to expand on relevant terminology or concepts where deemed necessary, keeping in mind that you are trying to communicate your research to academics in many research fields and to the general public. As with any journal, all articles will be subject to peer review. First, the article will be subject to a technical review whereby the scientific, technological, engineering or ethical methods and results presented in the article are evaluated. Thereafter, the tangibility of the links made by the authors in the article between their research and the superhero genre are assessed. Each article will be reviewed by a minimum of two reviewers and the journal uses a traditional closed peer-review model. All papers will be available online upon successful completion of the review process. In addition to making reference to past publications or academic materials in your prospective submissions, it is also important to refer to the source materials i.e. comic

books and films, in your submissions. The reference list for this editorial includes a number of examples of how to cite comic books [1, 13, 14] and films [2, 7, 15] for submissions to the journal.

I believe that the journal *Superhero Science and Technology* provides active researchers with a distinctive publishing opportunity. Combining current research with the superhero genre will lead to articles with the potential to reach a large readership demographic. The provision of such articles to the wider community will undoubtedly increase the exposure of your research. These articles can also act to inspire the next generation of scientists and engineers while demonstrating the lateral thinking of your research group. Such articles can stimulate people to think differently about research in science, technology, engineering and ethics. Many people outside the academic world may feel that science and engineering concepts are complicated and incomprehensible. By writing an article for this journal you can address this issue in a constructive manner. Finally, writing an article for the journal requires you to think differently about your research. This viewpoint may lead to new and innovative ideas for your research, and foster “thinking outside the box” in your current and future research. With these points in mind, I encourage you to submit articles to be considered for publication in the journal *Superhero Science and Technology*.

Think super!

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