## Merieme Chadid

Merieme Chadid was born on October 11, 1969, in Casablanca. She is an explorer, professor in the University of Nice, and an astronomer for the «Centre National des Astronomes» in France. Chadid is the first female astronomer to have led an expedition in the heart of Antarctica as part of a scientific program composed of twenty male scientists. In so doing, she became the first woman to set foot in Antarctica.

Merieme Chadid was born to a modest family in Casablanca. Her father was a blacksmith and her mother a housewife, who took care of the couple's seven children. In spite of her humble origins, Chadid decided to be an astronomer at the age of twelve, when her brother Mustapha offered her a book by the famous astronomer Kepler. Since then, she has pursued her goal one step at a time.

During her teen years, Chadid read extensively about the sky, its stars and its planets. In 1992, she graduated with a Masters degree in Physics from the University of Casablanca. After graduation, Chadid faced a difficult decision: leave her family in order to pursue the relevant field of study for her professional objectives in a French University, or remain with her family and renounce the opportunity of turning her passion into a profession. The decision was not an easy one, considering that her family expected her to have a family life rather than a professional one. In the end, Chadid opted for the pursuit of the graduate degree «D.E.A.» in Astrophysics, at the University of Nice.

Merieme Chadid's first year in France was far from being easy. She suffered from many discomforts that included isolation, loneliness, the necessity to adapt to a new country, the requirements of a new educational system, being a woman in a male dominated field, and being a Moroccan in a postcolonial empire. However, thanks to her perseverance, Chadid surmounted all these difficulties and graduated with a D.E.A. in 1993.

Following graduation, Merieme Chadid applied for a position within the «Observatoire de Haute Provence,» that would allow her to write her PhD dissertation while maintaining constant contact with the sky, its stars and its planets, and with worldwide astronomers who were there on observation missions. Unfortunately, her application was initially rejected: the director explained

that the Observatoire de Haute Provence suited hermits, but certainly not a student. It should be noted that the Observatoire was located in such a remote area that no student at that time had sojourned there before. Thanks to Chadid's steadfast determination, she kept reiterating her plea until she obtained the expected response. Thus, she lived in near seclusion for three years writing her dissertation, while continuing to observe and study the sky, its stars and its planets.

In 1996, Merieme Chadid graduated with a PhD in Astronomy and Astrophysics at the University of Paul Sabatier, in Toulouse. The daily newspaper «Le Provençal» published an article entitled «*Une thèse sous les coupoles*,» (*A Dissertation Under the Cupolas*) about Chadid's doctoral findings: Merieme Chadid detected for the first time waves of hypersonic shocks within pulsating stars, explained the physical origin of these pulsations, and contributed to a better knowledge of the Universe's mysteries.

Immediately after completing her PhD, Merieme Chadid was recruited as a research engineer at the prestigious «Centre national de recherche scientifique», in Montpellier. Although the beginning of her career was smooth, Chadid was nonetheless aware that she worked in a highly competitive male dominated field. Thanks to her competence and perseverance, Chadid knew how to provide the necessary efforts to get her scientific projects accepted, control international scientific programs, and lead teams of male scientists. From 1998 to 2001, she was sent to the most hostile desert in the world, Atacama Desert in Chile, in order to install «the Very Large Telescope», the biggest telescope in the world. Once again, Chadid led a life of seclusion: The closest village to her post was eight hours away by dirt road. But when one has a passion, one does not get bored, even in the most remote lands in the world. Chadid was busy observing the sky, its stars and its planets.

In 2002, in spite of her Moroccan nationality, Merieme Chadid was recruited in the French public sector as an astronomer at the «Observatoire la Côte d'Azur» and at the «Union Internationale des Astronomes.» This professional evolution transformed Chadid's passion for astronomy into a profession. Yet, it was in 2006 that Chadid fulfilled her professional dream: the

«Institut polaire Paul-Émile Victor» designated her as the leader of an expedition to the South Pole. As such, she headed an international scientific program, composed of twenty male scientists, whose objective was the installation of a major observatory in the South Pole. Following one year of intensive preparation, Chadid and her team departed to the South Pole on board of the icebreaker «Astrolabe.» Though meteorological conditions were discouraging, Chadid and her team braved these extreme conditions to reach and install telescopes at Dome Charlie, located in the heart of Antarctica, 1100 km from French base Dumont of Urville and 1200 km from the Italian Base Terra Nova Bay. Aware that she was the first female astronomer and Moroccan to set foot in the Antarctica, Chadid planted the Moroccan flag at the site. To celebrate the event, she cooked a Moroccan couscous with kangaroo meat for her colleagues.

Merieme Chadid does not live isolated in an ivory tower. Admittedly, Chadid considers herself primarily as a theoretician astronomer. As such, she spends part of her time in her office, theorizing and modelizing the observations she makes on the ground or through spatial satellites. Nevertheless, she is also an observer astronomer, devoting part of her time to exploration, discovery, adventure and experimentation. Moreover, she aspires to be a «popular» astronomer.

Merieme Chadid wishes to reinforce women's role in science and to bequeath a passion and knowledge for future generations. To facilitate these goals she actively participates in making astronomy more accessible through conferences, round tables and documentaries in France, Morocco and elsewhere. Currently, her documentary on astronomy, *Tarik Annajah (The road to Success)*, is distributed on Al Jazeera Children's Channel. Similarly, she presides over an international program that gathers the Young Global Leaders, the World Economic Forum and the Scientific International Union, whose mission is to promote science in the East and the South. After a conference that she gave during the annual summit of the World Economic Forum in Davos, she was honored by the title of «Young Global Leader 2008.»

When Merieme Chadid considers her humble origins, her condition as woman in a male dominated field, her nationality in a world of geopolitical inequalities, and her professional accomplishments, she maintains that there is hope for all those who work hard to achieve their dreams.

## **Osire Glacier**

## **Sources**

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*«Hommage du mois: Meryem Chadid, »* last accessed February 13, 2010, http://www.amb-maroc.fr/accueil-actualit%E9/hommage/portrait-meriem%20chadid.htm

«The Stargazer, Merieme Chadid, Explorer/Astronomer, Morocco, » Venture Magazine (April 2008): 27.

Rebecca Miller, *Science Hero Merieme Chadid*, last accessed February 22, 2010, <a href="http://www.myhero.com/myhero/hero.asp?hero=Meryem Chadid 09">http://www.myhero.com/myhero/hero.asp?hero=Meryem Chadid 09</a>

«Raedat, Pioneering Women, » Meriem Chadid (documentaires en plusieurs parties,) Aljazeera channel, last accessed February 22, 2010, <a href="http://www.youtube.com/watch?v=0XfTH6JiNps">http://www.youtube.com/watch?v=0XfTH6JiNps</a>.