13-year-old Raji Doshi wins 2026 3M Young Scientist Challenge for a solution to ocean acidification

Awards · 18 October 2026 · https://www.shanmugamiasacademy.in/current-affairs-english/2026/10/18



News

Raji Doshi, a 13-year-old Indian-American eighth-grader from Farmington, Connecticut (USA), won the 'Discovery Education – 3M Young Scientist Challenge 2026', earning the title 'America's Top Young Scientist' and $25,000 (announced 14 Oct 2026). The finals were held on 12–13 Oct at 3M's headquarters in St. Paul, Minnesota. Her 'ALKACORE' system combines macroalgae cultivation with aragonite to raise seawater alkalinity and remove CO_2. Second and third: Aaisha Asif (Florida) and Sharvi Mahajan (California).

Key facts

Winner	Raji Doshi, 13, Grade 8 (Stanford Online school), Farmington, Connecticut
Prize	$25,000 + title 'America's Top Young Scientist'
Invention	ALKACORE – macroalgae + aragonite (calcium carbonate) – raises alkalinity, removes CO_2; computer model for the best aragonite dose
Event	Finals 12–13 Oct, announced 14 Oct 2026; 3M HQ, St. Paul, Minnesota
Organisers	3M and Discovery Education; mentor – 3M engineer Deborah Isabelle

Runners-up	Aaisha Asif (Sarasota, Florida), Sharvi Mahajan (San Diego, California) – $1,000 each

Background

- Science: ocean acidification – when the sea absorbs atmospheric CO_2, $CO_2 + H_2O \rightarrow$ carbonic acid (H_2CO_3), raising hydrogen ions and lowering pH. Average ocean pH, about 8.2 before the Industrial Revolution, is now about 8.1 – still alkaline, but falling.
- Effects: fewer carbonate ions make it harder for corals, oysters, snails and plankton to build calcium carbonate (aragonite / calcite) shells and skeletons. Ocean warming causes coral bleaching – corals expel the 'zooxanthellae' algae living in them.
- Global goal: Sustainable Development Goal 14 (SDG 14 – 'Life Below Water'); target 14.3 – minimise ocean acidification. The UN 'Decade of Ocean Science' is 2021–2030.

Tamil Nadu link: the Gulf of Mannar (between India and Sri Lanka) is rich in coral reefs – the Gulf of Mannar Marine National Park (1986) with 21 islands and the Biosphere Reserve (1989; the first marine biosphere reserve in South and South-East Asia). Acidification and warming threaten these reefs and the seagrass beds that are home to the dugong.

Shanmugam IAS Academy – your next step

- **Courses:** TNPSC Group 1, 2 / 2A (Prelims + Mains), Group 4, UPSC / IAS – Coimbatore · Madurai · Online – https://www.shanmugamiasacademy.in/fees
- **Books (PDF):** TNPSC PYQ books, UPSC books – https://www.shanmugamiasacademy.in/study-materials
- **Free quiz + daily PDFs:** https://www.shanmugamiasacademy.in/free-pdf-download · All news of this day: https://www.shanmugamiasacademy.in/current-affairs-english/2026/10/18

Admissions – call / WhatsApp: 99941 46662 · 99944 27714 · www.shanmugamiasacademy.in