Synthesis of monochiral multiwalled carbon nanotubes XUEDONG BAI, Institute of Physics, CAS, Beijing 100080, China, and National Institute of Materials Science, Tsukuba, Ibaraki 305-0044, Japan, ZHI XU, ENGE WANG, Institute of Physics, CAS, Beijing 100080, China, DMITRI GOLBERG, National Institute of Materials Science, Tsukuba, Ibaraki 305-0044, Japan — So far, it remains a challenge to obtain multiwalled carbon nanotubes (MWCNTs) with the same chirality for all of the shells, i.e., monochiral MWCNTs. Here we report the synthesis of the monochiral MWCNT, with all of the concentric cylinders of a MWCNT exhibiting nearly identical chiral angle, by using microwave plasma assisted CVD method. Among the all kinds of monochiral MWCNTs, several chiral angles are found to be statistically dominant.